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# MODERN PORTRAITURE

by

Stanley R. Jordan

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# FOREWORD

There is a widespread and growing interest in photography today and hundreds of thousands of men and women have selected it as a hobby. Many amateurs produce photographs which, in artistic quality, compare favorably and often excel those made by professional photographers. It is from this group that the professional photographers of the future will be recruited. I cannot emphasize too strongly that this book, although written by a professional photographer, is intended for this new generation of photographers both amateur and professional. Anyone with a knowledge of the elementary principles of photography can understand and apply the methods described. Highly technical terms have been avoided. Their use may imply that a writer's mind is a veritable storehouse of scientific facts, but such stuff is dull reading and probably adds very little to the average man's progress in photography.

No attempt has been made to exhaust every ramification of the subject nor have I dealt with every camera, lens, or other type of equipment. In many instances, for example in connection with lighting equipment, I have shown what, in my opinion, is the best available today. Some of the units are, of course, more costly than the beginner requires, but with the great variety of equipment obtainable it is easy to select satisfactory substitutes. It would, obviously, be unfair to the advanced amateur and the professional to suggest even by the illustrations the use of makeshift equipment. The fact that most of the lighting units shown are in daily use in the motion picture industry indicates qualities which the photographer would be wise to consider before investing money in equipment.

The methods described in this book are sound and practical and are in constant use in my studio.



The psychological aspects of portrait photography have interested me for years, and I have devoted considerable space to the subject. I am not a professional psychologist and my observations are only intended as a basis for profitable research by others.

I don't believe any competent authority will dispute the statement that portrait photography has not kept pace with the progress of photography generally, although the facilities which have made the remarkable results obtained by commercial photographers possible are also available to portrait studios.

I am convinced that the opportunities in portrait photography are greater today than ever before. Many young men, attracted by reports of large fees paid for advertising photographs, are inclined to overlook the possibilities in portraiture.

There are hundreds, perhaps thousands, of cities and towns in the United States where there is either no photographer at all or at least not a first rate studio. There are, in my opinion, opportunities for at least 10,000 amateurs in this country to become professional portrait photographers.

STANLEY R. JORDAN

San Francisco, California  
November, 1938

# CHAPTER ONE

## The Studio

### *Preliminary Considerations*

There are almost as many kinds of studios in the world as there are photographers, but few are fortunate enough to occupy premises constructed especially for photographic purposes. In most cases it is necessary for the photographer to adjust himself to the available space in the building which he occupies. The landlord whose premises are leased to a photographer can count himself fortunate if he escapes the necessity of tearing out partitions and changing the electrical wiring and plumbing.

An attempt to provide a layout for the ideal studio would render the plans useless for the majority because the requirements of each photographer are different.

Many of the features suggested for the modern studio are the result of a careful study of the psychological aspects of portraiture. There is an immense field here and very little has been written on the subject. It is a fundamental truth with which I think everyone will agree, that it is the psychological quality of a photograph that determines whether it is a portrait or a mere record of the subject. The psychological quality of a portrait has to do with the *character* of the subject rather than his or her height, weight or physical appearance. Most of us have heard the “spiritual” qualities of portraits by the old masters discussed; what is actually meant is the psychological



character of the subject of the portrait as distinguished from the technical qualities of the painting or drawing. When people look at a photograph and comment upon the “expression” of the subject, what they actually mean is its psychological quality.

Of the value of portraiture to the biographer and historian, Carlyle, in a letter written in 1854, says, “In all my poor historical investigations it is one of the most primary wants to procure a bodily likeness of the personage inquired after; a good *portrait*, if such exists; failing that, even an indifferent, if sincere one; in short *any* representation, made by a faithful human creature, of that face and figure which *he* saw with his eyes and which I can never see with mine. Often I have found the portrait superior in real instruction to half a dozen written biographies, or rather, I have found the portrait was as a small lighted *candle*, by which the biographies could for the first time be *read*, and some human interpretation be made of them.”

The *first* impression of the subject\* upon entering the studio is only exceeded in importance by his or her mental attitude while facing the camera. Some subjects are actually frightened while in a studio. Everything possible should be done to put them at their ease immediately.

The one man studio has a decided advantage because it is possible to maintain an unhurried atmosphere. Further, the personal attention of the photographer to every detail is flattering to the subject, lends an air of importance to the sitting and creates the impression that the resulting photograph will be unique, an individual creation—not just a machine product.

I am a firm believer in the psychological value of privacy, not only in the camera room but in the reception room also. Having a portrait made is an unusual occurrence in the lives of most people, and it is much too personal to share with a room full of strangers.

The photographer should meet the subject in the reception room, never in the camera room. An informal chat is well worth the time required, for it provides an opportunity to study the personality of

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\*I use the term “subject” instead of “model” because to me, “model” implies one who poses for artists and photographers for compensation.

the subject under the most favorable circumstances. The preliminary interview should disclose the purpose of the photograph; everyone who has a portrait made has a reason for it. No studio can be successful without satisfied customers, and it is essential that portraits serve the purpose for which they are intended. By that I mean the photographer should find out whether the picture is intended for a gift to the members of the subject's family, and as much as possible about the type of people to whom it is likely to be presented.

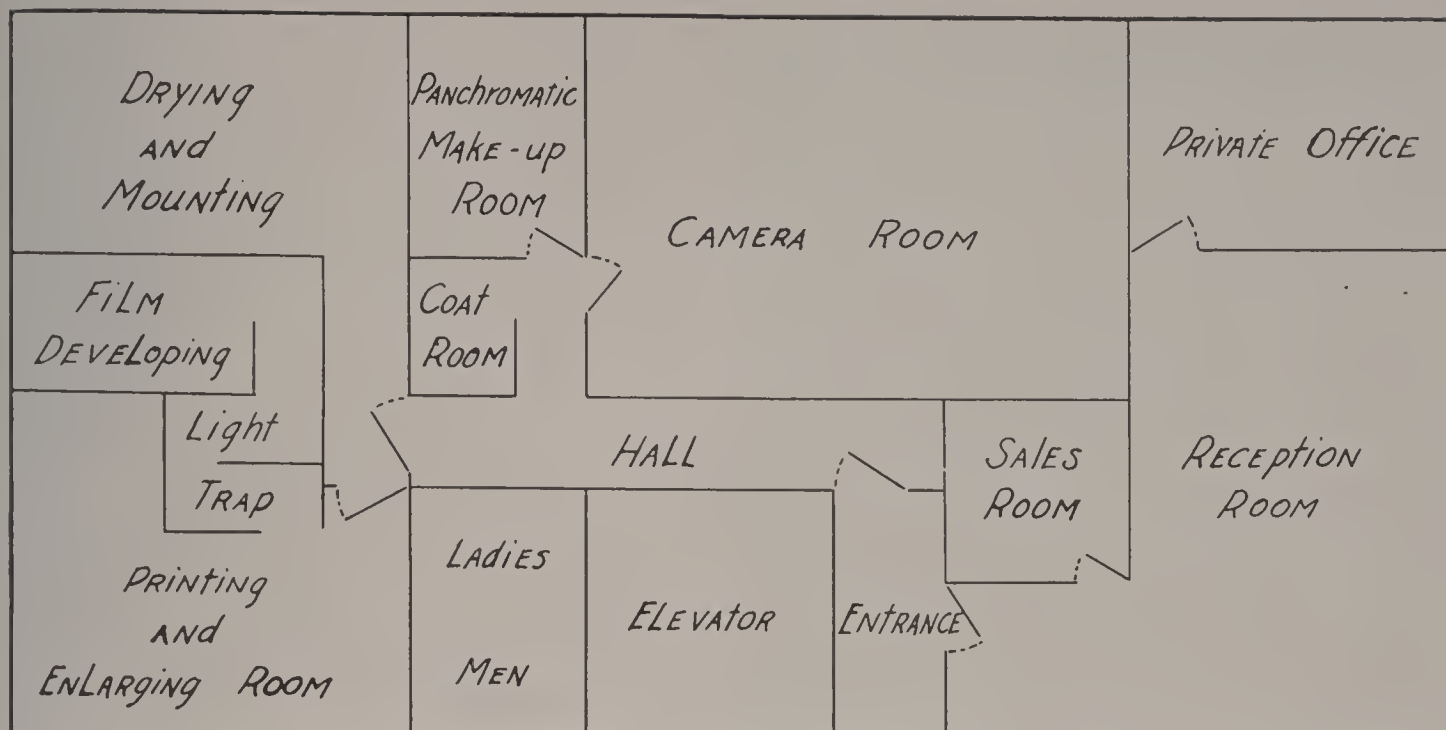
Some people are reluctant about discussing the character of the intended recipient of a portrait, but the desired information can usually be obtained by asking a few discreet questions. Suppose, for example, that a woman desired a portrait of herself for her husband. If, in the course of the interview, she reveals the fact that he is opposed to the use of lipstick, that he will not permit her to wear a red dress and that he is not interested in art, music, or literature, there is no choice but to make a conservative portrait. Photographs are always subjected to the scrutiny of relatives and friends, and a portrait that meets with the approval of both the subject and a majority of the self-appointed critics can be considered a success.

Before going further, I want to explain that by the word "portrait" I mean a characteristic likeness of the subject, honest in technical and artistic craftsmanship. I do not intend, anywhere in this book, to distinguish between amateur and professional photographers, because the methods I intend to describe can be used with equal facility by either. I believe that a portrait can be equally good whether it is made purely for artistic purposes or for profit.

### *Studio Floor Plans*

The reader will note, by referring to the floor plan shown in Figure 1, that there are three general divisions or departments in the studio. Entering the studio from the elevator, the reception room, sales room and office are located so that visitors who have business other than sitting for a portrait do not disturb the operations in the camera room or dark rooms. The reception room is a comfortable room in which to wait if the camera room is temporarily in use. A radio, magazines and cigarettes are provided.





*Studio Floor Plan*  
Figure 1

It will also be noted that the camera make-up and dressing rooms are located as a unit, immediately adjoining the reception room. The darkroom and finishing room is located in the rear of the camera and dressing rooms so that, in the normal operation of the studio, employees will not be disturbed by the public entering and leaving the premises.

A studio with two camera rooms could easily use this basic idea by having the entrance hall between the two camera rooms. If a studio requires two or more camera rooms, however, I believe a reception room, even if it be small, should be provided for each camera room. The dressing room may be built within the walls of the camera room—a reception room, never!

I am thoroughly aware of the fact that many of the suggestions I have made and some of those to follow will find little favor with a certain class of photographers. I refer, of course, to those who operate rackets and price cutting schemes. The subject gets about as much personal attention in a studio of that kind as an automobile gets on a volume production assembly line. Few of the photographs produced in such places are worthy of the word "portrait." From a mere money grabbing point of view, they are sometimes temporarily suc-



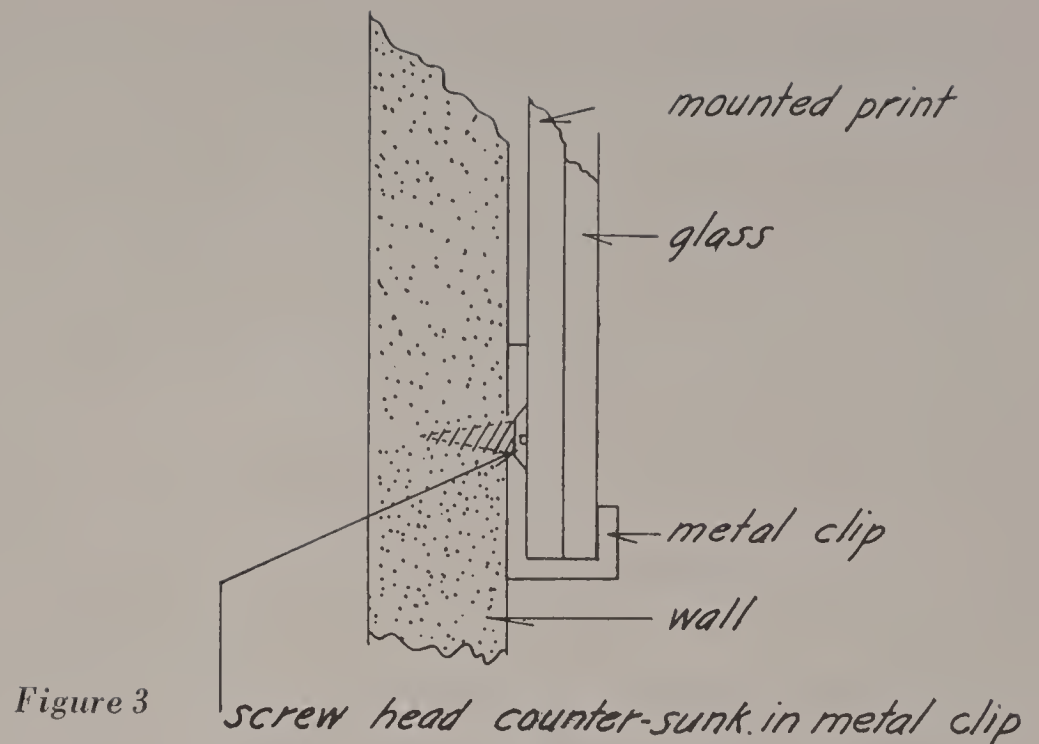
*Figure 2*  
*Studio Wall Display*

cessful. They have little if any good will in the community and to continue in business they depend for customers upon the source of supply which the late Barnum had in mind when he coined his famous phrase "a sucker born every minute."

It is a good idea for the photographer to imagine himself entering the studio in the place of his subject. To create a favorable first impression, the entrance to the studio should be warm and well lighted. Light and warmth inspire confidence; darkness and cold are the allies of fear and suspicion.

### *The Reception Room*

The reception room should be designed to serve a dual purpose. Many subjects are accompanied by relatives or friends and the reception room should also be a comfortable waiting room. Visitors can be a profitable source of business for the studio, and they should be shown every courtesy. In my reception room, there is a radio, books, the current copies of the better magazines (for both men and women) and the popular brands of cigarettes. At least one large divan and enough comfortable chairs should be provided to seat all visitors. Ash trays and reading lamps are, of course, essential.



The walls of the reception room offer an excellent opportunity to familiarize the public with the photographer's work. (Figure 2.) There are forty photographs under glass on the walls of my studio. The 8"x10" prints are displayed on 14"x18" mounts; 11"x14" prints on 16"x20" and 16"x20" prints on 24"x30" mounts. New pictures should replace old ones as frequently as possible to maintain the interest of regular visitors to the studio. Several years ago, I had a large number of standard size frames and the studio display consisted entirely of framed pictures. I soon found, however, that the work of putting a new print in a frame was such a task that I did not change them often enough.

Every print should bear the signature of its maker. Displaying pictures made by other photographers may be a laudable enterprise, but it leads to complications. Some busy-body is sure to come along and ask, "Are all of these photographs yours?" And, if there is one print made by another photographer, the curious one will inspect the signature on every print in the studio. It's the old story of a "Wet Paint" sign providing an irresistible attraction to the fingers of passers-by.

There is a very sound and practical reason why a photographer should display only his own pictures. If photographs made by others are shown, some may wonder whether or not the better pictures in the



room were made by the photographer or some other person.

Glass and print are held in place by an aluminum clip screwed to the wall. (Figure 3.) This clip is the product of my own work shop and has resulted in the saving of considerable time and annoyance. Most of the prints displayed are portraits, but there is a liberal number of salon prints which are of general interest to the public.

### *The Dressing Room*

The dressing room should be well-lighted, warm and comfortable. It should be a *room*, not just a space behind a screen or curtain, and it should not be smaller than six by eight feet. The application of cosmetics requires a first grade mirror, and a special arrangement of lights which will be described in connection with "Make-up." There should be a generous number of clothing hangers and hooks to hang them on.

### *The Camera Room*

In the early days of photography, daylight usually from a skylight in the north slope of a roof furnished the light source for portraits. Backgrounds and furnishings were, for this reason, of the same general style in every studio. Artificial light changed all of this, the flexibility of modern equipment making a wide variety of effects available to every studio. Many large studios have several camera rooms some of which have fireplaces, staircases and other architectural features designed for wedding and group pictures. Some authorities suggest that the camera room should be furnished as much like a home as possible so that the subject can relax during the making of a portrait. I am in complete accord with the *purpose* of the plan, but I see very little merit in the method. In the first place, the camera and lens cannot be disguised and the lights cannot be concealed. I am inclined to place the responsibility for failure to put the subject at ease upon the photographer or his assistants. The well equipped camera room should, however, be equipped with comfortable furniture that will harmonize with the decorative scheme of the studio.

It is impossible to specify the exact size of the camera room, but if standing figures are to be photographed, it should not be less than

twenty-five feet. And if lenses with a focal length of more than 14 or 15 inches are to be used, the room will have to be longer in proportion. There is a formula by which the focal length of a lens suitable for use in a room of known dimensions can be determined. The formula is given below, with the suggestion that those who may have occasion to use it keep this fact in mind. A good lens will last a life time, whereas studio quarters are often temporary, so the limitations of a particular camera room should not be the deciding factor in the selection of focal length.

Space must be provided at one end of the room for background posing furniture, and other accessories. At the opposite end, there must be enough space for the camera and room to get behind it without bumping into the wall. Allowing five feet behind the subject and five feet behind the camera leaves fifteen feet between subject and camera in a room twenty-five feet long.

Having determined the actual floor space available, it is now necessary to determine the desired image size on the negative. This, of course, must be based on full figure portraits and for 5x7 film a 5 inch image is about the maximum. A man 70 inches in height reduced on the ground glass to a 5 inch image represents a reduction of  $70 \div 5 = 14$ ; therefore, 14 is the reduction ratio.

The rule is that the working distance, divided by the reduction ratio plus 1, equals the focal length of the lens to use. In the example given, the working distance or D, is 15 feet or 180 inches. The reduction ratio, R, plus 1 is  $14 + 1$ , or 15. Dividing 180 by  $15 = 12$ , which is F, the focal length of a lens necessary to produce a 5 inch image of a man 70 inches in height on a 5x7 film with the camera 15 feet from the subject.  $D \div R + 1 = F$  or  $180 \div 14 + 1 = F$  or  $\frac{180}{15} = 12$ .

Although a minority of the photographs made in the average studio are full length portraits, the floor space should be available if needed

This brings to mind one of the common short-comings of most buildings available for studio quarters: Lack of sufficient ceiling



*Figure 4. The movable light bridge.*

height. The ceilings of the building I occupy are twelve feet high. This is higher than average in modern buildings, but I prefer even more height. Low angle shots, with the camera practically on the floor, require high backgrounds, and they cannot be used in rooms with low ceilings.

The camera room should be equipped with three background colors; white, black, and neutral. I have a permanent background ten feet high and twelve feet long built at one end of the studio and finished in white. For high key pictures, the background is lighted by ten lamps in reflectors on a movable light bridge eleven feet above the floor. (Figure 4.)

The black and neutral backgrounds are mounted on a movable frame. The black is a cloth covering, the neutral is a specially made curtain of ordinary green window shade material mounted on a roller so that it can be raised out of the way when the black background is used. This background is eight feet high and ten feet long, and is equipped with ball bearing casters to facilitate movement about the camera room. The black is used when a *jet black* background is desired. The green curtain can be used for a range of tones from medium to almost black, depending upon the light that is used upon it. (See Figure 5.)



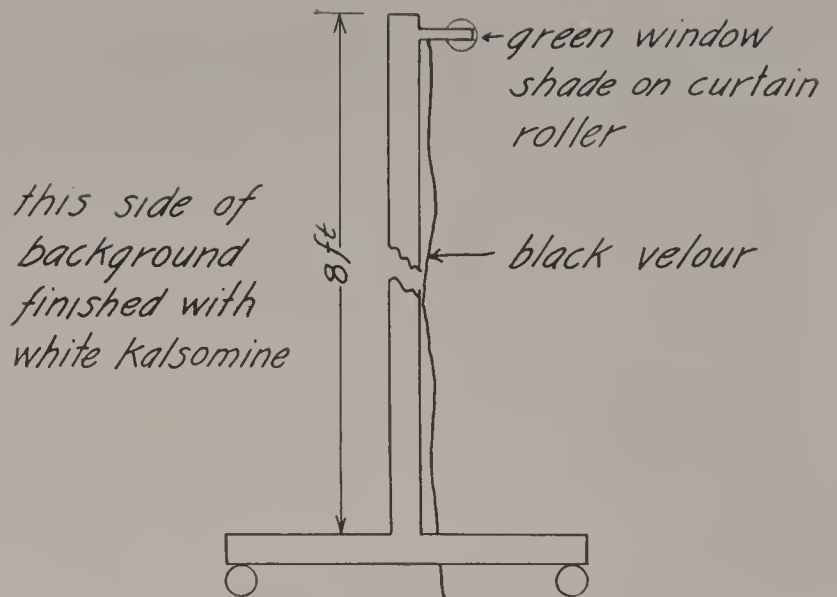


Figure 5

White screens are difficult to finish, and I hope the reader who has occasion to build one can profit by my experience. First, of course, it is necessary to have a frame of 2x4 material constructed in exactly the same way a carpenter builds a partition in a building. I used three pieces of five-ply plywood, four feet wide and ten feet high for my background. I also used an extra piece of the same material on the side wall at right angles to the background to get the effect of the *corner* of a room. (Figure 6.)

Three-ply material can be obtained, but it is not heavy enough for such a large background. The plywood is next nailed to the frame with finish nails which are driven well into the wood with a nail set and the holes filled with putty. It is particularly important that the joints between sections be filled level full with wood filler or putty; otherwise an ugly shadow will result. The entire background is next sanded until it is perfectly smooth and then given a good coat of white shellac. Now here is the important part of the job. Do not be tempted to use any kind of paint or oil finish, because it is sure to have enough lustre to reflect light. Use Kalsomine which dries in a few hours, and if it gets soiled can be washed off and repainted. When dry, it is absolutely *flat* white with no grain of wood showing and no glare will be reflected from it.

One of the most important advantages of artificial light is the



*Figure 6. Corner effect  
obtained by addition to background.*

possibility of control. If there are windows in the camera room, they should be covered with heavy opaque shades or, preferably, closed up entirely. If all of the light in the camera room is subject to control, negatives of predetermined quality can be made because exposures will be based on uniform light values.

## CHAPTER TWO

### Equipment

The portrait photographer should provide himself with the best equipment available. Good tools are essential to good craftsmanship and makeshift equipment is poor economy.

I know of no hobby or profession so infested with “gadgets” as photography. Many of these “gadgets” are unnecessary, if not an actual nuisance. They are all right for the dilettante; their purchase keeps money in circulation and the use of them probably does no harm.

But the serious amateur and the professional photographer should constantly strive for a simplified technique. The photographer whose experience is limited should take plenty of time when making purchases because photographic equipment is expensive and mistakes are costly.

#### *Lenses*

The most important item of equipment for portrait photography is the lens. A lens made by a reputable manufacturer should be regarded as a long term investment because with proper care it will out-last several cameras.

Long focus lenses are generally recommended for portrait photography on the theory that they produce truer perspective. That this supposed advantage is largely imaginary is now known to most photographers. Of course, anyone can place a camera equipped with a



short focus lens so close to the subject that what is commonly known as *distortion* or untrue perspective is inevitable. The long focus lens throws a larger image on the ground glass, thus *compelling* the photographer to move the camera farther away from the scene in order to keep the picture within the limits of the plate. *Moving the camera, however, does not change the perspective*, it merely reduces the size of the image on the plate. The short focus lens *always* covers a wider field and the image is correspondingly smaller. If a view camera is set up and a long and short focus lens compared by focusing on a nearby street scene, the difference will be evident the moment the image appears on the ground glass; but the *perspective* is the same for each lens.

This point is clearly demonstrated by three pictures. Figure 7 is a *contact* print from one-half of a 5x7 negative and was made with a 10 inch lens. Figure 8 is also a *contact* print from the other half of the same negative, and was made with a 6 inch lens. The only difference between these two pictures is that the image is larger in Figure 7. Now look at Figure 9. This is an enlargement of a portion of the negative from which Figure 8 was made, so that the *image* is the same size as the image in the *contact* print in Figure 7. There is no apparent difference between Figures 7 and 9, and I offer these prints as conclusive evidence that there is no difference in *perspective*.

I hasten to add for the benefit of those of limited experience that it would be easy, with the same lenses I used to make the pictures in Figures 7, 8, and 9 to produce negatives which would apparently justify an entirely different conclusion. Everyone has seen the monstrosities used to illustrate the theory that difference in the focal length of lenses change perspective. A careful examination of pictures used to prove the long focus story should convince anyone that the examples are obtained by the deliberate misuse of the short focus lens. Common sense must, of course, be used in posing subjects and in keeping the camera far enough away when working with the shorter focal lengths.

Plate size in relation to the focal length of the lens is an important consideration. A lens used with one plate might be of comparatively



*Figure 7*



*Figure 8*



*Figure 9*

long focal length but the same lens with a larger plate might be considered a short focus lens. For example, a 10 inch lens when used with an 8x10 plate would be considered a short focus lens for general work, but the same lens used with a 4x5 plate is of relatively long focal length. In other words, a 10 inch lens used with a 4x5 plate is the equivalent of a 20 inch lens when used with an 8x10 plate.

“Distortion” or poor perspective is caused by using the short focus lens too close to the subject. The closer the camera in relation to subject, the greater the apparent distortion and likewise, the shorter the focal length, the more noticeable the distortion will be in images of the same size. The distance from camera to subject, which will result in a photograph that is completely free from distortion, depends upon the focal length of the lens. The photographer can determine, by making a few test shots at measured distances, how close to the subject he can work with a particular lens without obtaining noticeable distortion. One of the advantages of cameras equipped for ground glass focusing is that distortion can be detected by a study of the image on the ground glass.

In modern studio practice, most prints are made by projection. The negative made with the short focus lens is simply enlarged to compensate for the smaller image, the extra space around the desired portion of the negative being eliminated in the enlarging.



The short focus lens has an enormous advantage in depth of field; i. e., the distance between the nearest point to the camera and the most distant point that is sharply in focus. This also makes faster shutter speeds possible because it is not necessary to stop down so far to get depth. The plane in which all objects are sharp is comparatively thin with the long focus lens and to obtain a sufficient depth of focus it is often necessary to move the camera back so far that the advantage of the long focal length is lost entirely. The only remaining way to increase the depth of focus is to stop down which increases exposure—a serious handicap to the portrait photographer.

It is highly significant that in the motion picture industry, where short exposures are absolutely necessary, that the lenses used are of short focal length so that they may have a sufficient depth of focus to operate at large apertures.

Manufacturers have spent huge sums of money extolling the virtues of ultra-rapid lenses for portraiture. Maximum speeds, however, are only available when lenses are used at full aperture. Stopped down, the high speed objectives are no faster than any other lens when used at the same aperture. High speed is an expensive feature, especially in long focus lenses; and if it is necessary in order to obtain more depth of field, to work with the lens stopped down, it is a waste of money to buy one.

Many years ago, photography went picking daffodils, and the principal memento of that unfortunate expedition is the soft focus lens. The exponents of the soft focus lens have numerous reasons for their choice of equipment but few of them are convincing. Many of them, for example, argue that the human eye cannot focus sharply on both near and far objects at the same time and that the camera should see as we see with our eyes.

When we look at a given point, the mind, with the eye, is focused upon that point and, therefore, objects at an oblique angle, or in the distance are not sharply focused to the eye. But because of the fact that the mind at the moment is ignoring all except the particular object on which its attention is focused, our consciousness does not



register any feeling of out of focus. When we examine a photograph, we are looking at a scene which has been reduced to a flat plane, with the result that both the eye and the mind encompasses the whole of the photograph at one time. Because of this, any pronounced falling off of focus from one plane to the other becomes much more noticeable than any such situation could be when natural objects are being observed.

It is surely significant that the greatest living photographers use sharp lenses, and I predict that when the record of photography is finally written that few, if any, of the immortals will come from the soft focus department.

Many honest portrait photographers use soft focus lenses, and these remarks will not please them. But the modern trend is toward realism and “fuzzy” photographs are definitely a thing of the past. The frequent use of soft focus lenses by mountebanks to conceal bad craftsmanship has helped to place this technique in ill repute.

The theory that soft focus lenses were developed so that photographers could imitate painters has always amused me. Certainly, no one would attempt to justify the soft focus lens by comparing the results with the portraits of Goya, Holbein, or Ingres. The portrait of “Nurse and Child” (Figure 10) by Frans Hals is, in my opinion, about as sharply “in focus” as it is possible for a painting to be.

There is no such thing as a perfect lens for all purposes. For modern portrait photography I would insist upon an anastigmatic lens made by a reputable manufacturer. The lenses of Carl Zeiss, Voigtlander, and Cooke are recommended, my particular favorite being the Carl Zeiss Tessar. I do not mean to imply that only the above manufacturers make good lenses because there are many other concerns with reputations above reproach, whose lenses may be equally as good as the lenses I have named. I simply restrict my recommendations to the lenses I have actually used.

It is a good idea to purchase lenses subject to trial, and these terms should be arranged with the dealer *before* the lens is accepted. Make sure that the lens covers the plate *sharply* to the very edges.

The focal lengths suggested here are only approximate, and the lens selected will depend to some extent upon the kind of portraits to be made. For general work, a 12 inch lens can be used on 8x10 cameras. For large heads, a 16 inch lens is ample, but the long focus fans will say it is too short and call for a 20 inch lens. For a 5x7, a 10 inch, and for 4x5, about 8 inches are conservative—neither extremely short nor too long. I consider the 3 $\frac{1}{4}$ x4 $\frac{1}{4}$  camera a little too small for portraiture, but I have seen some excellent pictures made with a camera of that size equipped with a 6 inch lens.

Some authorities recommend the focal length of the lens to be used according to plate sizes. For example, to make large head photographs, a lens with a focal length, equivalent to the sum of the length and width of the plate is recommended. According to this formula a lens for an 8x10 camera should have a focal length of 18 inches. For three-quarter view and figure portraits, a focal length based on the diagonal of the plate is often recommended. Thus, for an 8x10 plate, a lens with a focal length of approximately 13 inches would be required.

The maximum speed of any lens can only be obtained when the lens is used at full aperture. If, as I have pointed out, the lens has to be stopped down to obtain sufficient depth of focus, there is no advantage in buying a lens faster than f4.5 even for photographing children. An f6.3 lens is fast enough for portraits of adults, but the f4.5 lens is more convenient to focus because the larger aperture throws more light on the ground glass.

## *Cameras*

There are a great many types of cameras on the market, but there is no single camera that is ideal for every kind of photography. Search for a universal camera is as hopeless as an effort to find a universal lens. A suitable camera for one photographer may be lacking in the very qualities another considers indispensable. One solution of this problem is to purchase the camera that most nearly meets the requirements. Many amateurs find one camera sufficient but most professional photographers own several cameras.





*"Nurse and Child"*

*Franz Hals*

*Courtesy E. A. Seemann*



Nearly all portrait prints are now made by projection. An 8x10 print today is seldom made by contact; it may be enlarged from 4x5, 5x7, or from one of several exposures on the same negative. Although most manufacturers of studio and view cameras have discontinued making cameras smaller than 5x7, it is possible to have reducing backs made for cut film magazines or for small negatives in cut film holders. A sliding back or sliding wood masks working under the ground glass back of studio and view cameras provide a means of making several exposures on one negative. Good negatives, 4x5, 5x7, or 8x10 in size can be retouched if necessary and may be enlarged to almost any size desired without showing objectionable grain or marks of retouching. Good 4x5 negatives enlarge nicely to 8x10 or 11x14, and the other sizes enlarge in about the same proportion. By using 4x5 negatives or by making more than one exposure on each 5x7 or 8x10 negative the professional photographer can submit more proofs and a greater variety of poses without excessive negative cost.

There are three general types of cameras from which equipment can be selected for any kind of portraiture. Many photographers use all three because each type has advantages—as well as some disadvantages. The three types are studio or stand cameras, view cameras, and reflecting cameras of which the “Graflex” is the best known in the United States. The reader will note that all have one feature in common—ground glass focusing. There is absolutely no satisfactory substitute for the ground glass as a means of focusing a camera for portraits. The ground glass also makes it possible to study the *composition* of the portrait, precisely as it will appear on the negative.

The Studio camera is the subject of many jokes among moderns. Certainly it is not a masterpiece of mechanical engineering, and no real improvements have been made in it since I can remember. But in defense of this lumbering behemoth, let me point out one great virtue—*stability*. Freedom from vibration is essential if prolonged exposures are to be made. Studio cameras were, of course, designed to support the weight of large heavy lenses and long focal lengths required a long bellows. The old timers made contact prints so a

studio camera for 11x14 plates had a bellows about the size of a mine shaft.

The chief objection to the studio camera is its dimensions. Built for 8x10 or 11x14, smaller negatives can be made by using a reducing back. Size and weight restrict the studio camera to interior work which means other equipment must be provided for portraits outdoors or away from the studio.

In many respects the view camera is the better camera for general use for it combines the adjustments of the studio camera with another highly desirable quality—portability. For use in the studio, the view camera should be installed on a substantial camera stand because most tripods are not solid enough and are too easily overturned. If extremely heavy lenses are used, view cameras are not substantial enough to support them.

For the amateur, the view camera has many good features; and it is my choice of equipment for those who wish to learn the fundamentals of photography. It has ample bellows extension for complete lens equipment from wide angle to telephoto, rising front, swing back, and vertical or horizontal pictures can be made.

I have made thousands of portraits with a 4x5 Graflex, and I consider this camera indispensable for work with children. My Graflex is equipped with magazines with a capacity of eighteen cut films instead of the usual twelve. The Graflex is a self-contained unit, ideal for fast exposures, particularly where rapid reloading is necessary. Another advantage is that the mirror reflector construction for focusing throws the image on the ground glass right side up. Studio and view cameras are, in my opinion, however, to be preferred for full length figure portraits. A low camera angle is often desirable in pictures of this kind, and the rising front available on view and studio cameras is necessary. Strange as it may seem, the only criticism I have concerns one of the features of the “Graflex” which is the pride and joy of the manufacturer, the “Focal Plane Shutter.” Mechanically, the shutter is all that is claimed for it but it is entirely too noisy for studio work; and it is very difficult to use for long exposures. When the shutter is opened for time exposures, the subject



*Figure 11*

*Reis Tripod with Tilting Top*

is usually startled by the sound and moves before the shutter can be closed. The obvious remedy, of course, is to yell “hold it” before opening the shutter—thus freezing the subject for the duration of the exposure but the practice is not recommended. I use a lens in a “Compound” shutter on my Graflex—and incidentally, a long cable release is a great convenience. When, for example, a portrait is made of a child, the subject is seated and the camera focused. The compound shutter is “set” and the focal plane shutter is then opened. Usually a half dozen negatives or more are made of a variety of expressions in this pose before it is again necessary to focus for another pose. Studio cameras should be equipped with a silent shutter operated by a bulb, and air valve.

For outdoor portraits the most satisfactory tripod is the type built for motion picture cameras. (Figure 11.) For studio photography, with a small view camera or a “Graflex,” the Agfa-Ansco Corporation make a good tripod. (Figure 12.)

An outfit consisting of an 8x10 studio camera, a 5x7 view camera for outside work, and a 4x5 Graflex for children and home portraits





*Figure 12*  
*Agfa Universal Tripod*

is complete enough to cover the entire field of professional portraiture. Those who specialize can get along with one or more of the types listed. For home portraiture, the amateur should consider the “Graflex” or possibly a miniature camera.

### *Miniature Cameras*

Although several hundred thousand miniature cameras have been sold, they are seldom used by professional portrait photographers; and I doubt that they will ever come into general use in portrait studios. There are several reasons for this—none of which constitute a valid objection to the miniature camera for amateurs.

The first problem is purely psychological and has to do with the confidence of the subject while in the camera room. Expecting to face a camera of the approximate size and appearance of a piece of field artillery, the subject is sure to be disappointed when confronted by an instrument indistinguishable from the Sunday picnic camera.

From a technical point of view, the chief objection to the miniature camera is that the negatives are too small to retouch.

Then, there is the matter of special fine grain developers and the

necessity of extreme care in the handling of miniature negatives. Dust spots on small negatives, when magnified in enlarging, cause endless trouble. The professional photographer must, necessarily, hire much of his work done and assistants skilled enough to work with precision (miniature) equipment are seldom available.

The amateur photographer has the advantage of plenty of time, and he can give his personal attention to every detail in the making of a picture.

I have been asked, on numerous occasions, for advice in regard to the purchase of miniature cameras. I have often recommended their purchase and even helped select the camera. I think they are fine for those who have spare time and a penchant for "gadgets." But I have never been sold on a miniature camera for any kind of portraiture except the home variety.

Advice to the miniature camera "fan" is generally wasted because most of them have made up their minds already and merely want someone to agree with them. Some of them, in fact, are downright belligerent about it, and those who have any regard for peace and quiet are cautioned against engaging in discussions on such controversial subjects. When a man with a print having grain the consistency of coarse sandpaper steps up, with a chip on his shoulder, and challenges you to find a "trace of grain," you are face to face with a bad case of self-hypnotism. For the benefit of any reader who might feel that what I have said is due to some sort of personal prejudice in this matter, I will rest my case on a paragraph from Page 160 of *Fortune Magazine* for October, 1936:

"There seems, then, to be no one reason for the minicam boom. But if we choose to dig deeper we come up with a subtle and perhaps significant fact: that by a very large number of people the Leica was not bought as a camera. Many a man who had owned a Kodak for years without feeling any impulse to see what he could do with it if he applied himself fancied that in the Leica he was finding a new invention that defied the laws of optics and would give him good pictures with no light to speak of and no effort save that of pressing

the button. The Leica didn't even *look* like a camera. No bellows, no bulk, no focusing hood; you shot from the hip, so to speak, and got your man. Beginning in 1932 the Leica traveling exhibitions in Germany gave added encouragement to the tyro in this wishful thinking. Featuring the masterly enlargements of such experts as Dr. Wolff, they gave him the impression that for a couple of hundred dollars he could turn out stuff just as good. True, to display the best camera work of artists like Wolff and Salomon and Hoffman and Aikins and McAvoy as the product of the Leica is something like pointing to sketches by James Montgomery Flagg as samples of the work of the Venus pencil. But as promotion it was a jim-dandy idea. And to encourage Americans further in the useful notion that the Leica was not a mere camera, Leica publicity brains even coined a new word to take the place of photography. The word was Leicography."

### *Lighting Equipment*

If a sample of every kind of lighting equipment could be gathered under one roof, as Noah assembled the animals in the Ark, the result would be an impenetrable jungle. I do not propose to add to the confusion by a discussion of every kind of lighting equipment, because the methods described in this book presuppose the use of incandescent lamps in suitable reflectors.

Since the introduction of Panchromatic film, the motion picture industry has, in my opinion, contributed more to the improvement of lighting technique than all other agencies combined. The almost universal use of incandescent lamps in motion picture production dates from the synchronizing of sound and pictures. Arc lights, formerly in general use, were abandoned because the microphone picked up the hissing and sputtering characteristic of that type of illumination. The earlier incandescent lighting units gave some trouble with a "hum" particularly when the lamps were cold but most of the faults have been eliminated. The finest lighting equipment available to the photographer today is unquestionably the equipment manufactured for motion picture photography.



Perfection of incandescent lighting equipment has not, however, rendered arc lights obsolete. In addition to their extensive use by commercial photographers, they are again being used in motion picture productions. Improved high-intensity arc lamps have been designed for color motion picture photography and no doubt many photographers will see possibilities in the new equipment for portrait photography.

Mercury vapor lights were also in general use by portrait photographers, but they have been replaced by incandescent lamps in the modern studios. The principal reason for this change is the general use of Panchromatic film which, being highly sensitive to red, permits extremely fast exposures when used with incandescent lamps. The mercury vapor lamp provides a light of very high actinic value in blue-violet rays, but is deficient in red rays, to which Panchromatic film is highly sensitive. Before Panchromatic film was introduced, the high actinic value of mercury vapor light provided the most rapid exposures with the plates and films then in use. Because of its deficiency in red rays, mercury vapor light exaggerates blemishes, freckles, and the tiny veins under the skin. Attempts to balance the mercury vapor light by combining incandescent lamps or by the addition of red neon tubing has not restored this type of light to its former popularity.

The Photo Flood lamp has wonderful possibilities for both amateur and professional photographers. With comparatively inexpensive equipment, the amateur can make intimate, natural portraits of his family and friends. I have an auxiliary outfit consisting of three reflectors, two collapsible stands and a 30-foot extension cord which can be carried in one suitcase. I have used this portable equipment for weddings, groups, and commercial shots away from the studio and in places where it would be impossible to use my regular equipment.

In a recent magazine article,\* I suggested that every photographer should try to develop a style or technique of his own, particularly in

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\*"Notes on Portraiture," *Camera Craft*, January, 1937.



*Left, Figure 13*

*Right, Figure 14*

lighting. I pointed out, for the benefit of beginners that a lighting outfit could be assembled for experimental work by wiring some tin dish pans for reflectors. An outfit can be made at nominal cost by purchasing the dish pans and other materials at the dime store, but there is so much low-priced equipment on the market that it is scarcely worth the trouble. I have made a lot of portraits with an outfit that cost less than ten dollars.

For those who require high-intensity lamps at a moderate cost, the “Cinelite”\* is recommended. (Figure 13.) This lamp uses the No. 4 photo-flood globe consuming 1000 watts, but 500 watt mogul based regular P.S.\*\* Mazda globes may be used. Portability is another feature of this unit.

The reflectors can be telescoped, one over the other, so that a dozen complete units can be transported in the luggage compartment

\*Cinelite M-R Type 16. Manufactured by Mole-Richardson, Inc., Hollywood, California.

\*\*The letters “P.S.” refer to the shape of the incandescent globe.

of a coupe automobile. The pedestal can be folded into a small space (see Figure 16) and when in use has a vertical adjustment of 54" to 84". This equipment is recommended for the amateur photographer.

The most important part of every piece of lighting equipment is the reflector. Regardless of cost or the material of which it is made, the important thing is the *form*, for this determines its efficiency. Modern artificial lighting has been called "painting with light," and that is a good description of what can be done with equipment that provides absolute *control* of all the light used in making a picture.

A north skylight was the light source for studio portraits in the early days of photography. When artificial light was introduced, it was used as a *substitute* for the skylight. The result was soft general illumination with the inevitable reflector on the shadow side of the picture. Accent lighting came in later, probably with spot lights from the theatre. Lights were grouped or suspended from the ceiling so that the light came from a *fixed* source like the skylight. The background, usually a painted scene on a cloth curtain, was also fixed in proper relation to the skylight. The better modern lighting unit is strong in precisely the qualities which were lacking in the old skylight—*portability* and *control*. By portability, I mean that the unit can be moved about the studio on casters or transported to any location where it may be needed. Control not only requires an efficient reflector, designed for a particular lighting effect, but the unit must be adjustable as to height and the angle at which the light is projected.

The lighting methods described in this book require equipment for general illumination, background lighting, and special effects, the type and number of lighting units depending upon whether the photographer follows the plans outlined generally or specializes in a certain kind of portraiture.

For general illumination, I have, for many years favored the "Rifle" floodlight. (Figure 14.) The parabolic reflector is made of chromium plate, spirally rifled and encased in a shell of aluminum. The unit is designed for use with 1000, 1500, or 2000 watt P.S. 52 lamps. The head is mounted on a telescopic pedestal, equipped with ball bearing, rubber-tired casters. The lamp receptacle and the switch





*Figure 15*



*Figure 16*



*Figure 17*

is encased in an aluminum housing, mounted back of the reflector. The head can be clamped at any height from about four to eight feet; or if desired, it can be removed from the pedestal and used on an overhead platform.

The variety of effects obtainable with two of these units is almost endless. They are powerful enough for instantaneous exposures. They can be used for general illumination of full figure portraits or they can be moved in close for dramatic lightings with strong contrasts.

Mole-Richardson, Inc. of Hollywood, manufacture what in my estimation is about the last word in lighting equipment, which is the "Solarspot." (Figures 15 and 16.) Incidentally, the products of that concern are unexcelled in material, workmanship, and efficiency.

The "Solarspot" is obtainable in several sizes ranging from 500 to 5000 watts capacity. One of the features of this lamp is that it

furnishes a beam of illumination which may be varied by focusing, to provide a smooth distribution in all beam divergences from 10 to 45 degrees. This compares with a light distribution over an angle of 60 degrees furnished by the "Rifle" type lamp.

Previously, spot-lamps have utilized the plano-convex condenser lens as the optical element. In spot-lamps utilizing the incandescent globe as an illuminant, this has been a serious limitation because plano-convex condensers of focus suitable for effective use with incandescent globes must be of short focus. This in the plano-convex type of condenser necessitates that they be made very thick, which reduces their light transmission capacity and makes them subject to excessive breakage even though manufactured of heat resisting glass.

The "Solarspot" combines the best features of both spot and flood lamps. Its focusing mechanism provides a highly concentrated beam when a spotlight is required and a floodlight of sufficient intensity and angle ( $45^{\circ}$ ) for the main light source.

The most common type of equipment for accent lighting is the spotlight of which there is an enormous variety. Care should be exercised in the selection of spotlights for the small studio, because more pictures are ruined by excess power in spotlights than by a lack of power. The smaller spotlights, of 500 watts or less, are useful for high lighting the hair in portraits of women. The larger spotlights are used for accent lighting, back lighting, and when heavy shadows are wanted.

Before buying a spotlight, project a beam of light on a wall and make sure there is no dark center or filament image from the lamp. The lamp receptacle should be mounted on a movable carrier that is adjustable for focusing from the outside of the housing. A mirror reflector should be mounted on the carrier behind the lamp. The head should be removable so that it can be used from an overhead platform or on the floor. The pedestal should be of telescopic construction on rubber-tired casters. Although the heads of most spotlights are well ventilated, the lamps produce a lot of heat which is likely to crack the condensing lens unless it is mounted in a frame designed to give unrestricted expansion.



For studios with plenty of floor space and ceiling height, there is another type of accent light called the "Sun Light" or "Sun Spot" (Figure 17). These units are extensively used in motion picture production for back and cross lighting from the top of sets and for front lighting of exceptionally large sets. They are also used for intense lighting through windows, doors, and for sunlight effects. The head of the "Sun Spot" ranges in size from 18" to 36" in diameter, depending upon the amount of light that is desired. The reflector is a concave mirror and the lamps used range from 2000 to 10,000 watts. The head is removable and the pedestal is similar in construction to the other units I have described. The "Sun Spot" is, as I have suggested, primarily intended for motion picture work on large sets, and unless special effects are wanted in a large studio, they are not essential in portrait photography.

### *The Overhead Strip*

The overhead strip (Figure 4) is one of the most important lighting units for portrait photography. The trend in modern decoration of homes and apartments is definitely toward light tones. High key portraits are in keeping with the new interiors, and a properly lighted white background is absolutely necessary. Most overhead strips consist of a single elongated metal reflector enclosing a row of receptacles for P.S. 52 type lamps. One of the essential features of an overhead strip is some method by which to securely lock the unit in any desired position from horizontal to vertical, or intermediate positions. The adjustment is necessary in order to correct the angle of the strip for various elevations and distances from the background. Most strips are made for four or five lamps and more than one strip may be required for large backgrounds. Small backgrounds can be lighted by spotlights or floodlights, but the overhead strip is more efficient and has the added advantage of saving valuable floor space.

### *Portable Panel Board*

Most manufacturers equip lighting units with switches, which are a convenience if not an actual necessity when working with a crew of stage hands. In the portrait studio, however, it is a nuisance



to have to go about turning lamps on and off. This inconvenience can be eliminated by the use of a portable panel board. Equipped with casters so that it can be kept within easy reach of the camera, it provides a centralized control for all lighting units. The panel board should have as many outlets as there are lighting units in the studio with a separate switch and fuse for each. There should be a main service switch on the panel board to cut off all power on the line from the building to the panel board. If all lamps are controlled from the panel, switches on lighting units can be eliminated, thereby reducing one source of short circuits and other troubles to a minimum.

### *Monotone Viewing Glass*

The photographer should visualize the finished picture while the lights are being placed in position. For this purpose the viewing glass or "Monotone Monocle" is a valuable device. (Figure 18.) For convenience in use it is mounted in a monocle frame which can be carried in the pocket or worn about the cameraman's neck on a small cord. Occasionally, they are mounted in ordinary eyeglass frames, but this method is not popular. For motion picture photography, they are often built into a view finder on the camera. They can be obtained for either Panchromatic or Orthochromatic film. The monotone filter or viewing glass is, as the name indicates, designed to reduce the scene from color as seen on the ground glass of the camera, to a range of tones in one color, and proportional in relative brightness to what the film will record. In other words, the eye can see, by the aid of the viewing glass, as the camera sees. Or perhaps it would be more accurate to say that the eye sees through a Panchromatic viewing glass what Panchromatic film sees through the lens. The tones observed through the glass approximate those in the finished photograph provided, of course, that a normal negative and a normal print is made.

The viewing glass is especially helpful in the making of pictures with strong contrasts and heavy shadows. Such a subject may seem to have plenty of illumination in the shadow portions when looked at with the naked eye. The observer will often be astonished to see



*Figure 18*

how devoid of detail such shadow areas are when seen through the viewing glass.

This, of course, means that the shadows need more light to avoid under-exposure. A portrait negative, badly under-exposed, is practically worthless because intensification or retouching will not put detail in the portion of a negative where it never existed.

The viewing glass enables the photographer to visualize the lights and shadows and the tone values of the scene as they will be recorded on the film. It is *not* a device to determine the correct exposure, nor is it a substitute for an exposure meter. It is never used over the lens of the camera to obtain modification of the color values of the subject, or to inspect the scene on the ground glass.\*

### *Exposure Meters*

A good exposure meter is an indispensable item of equipment,

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\*Viewing glasses or monotone filters are manufactured by the Eastman Kodak Company, Rochester, New York; by George H. Scheibe, Los Angeles, Calif., and by Harrison & Harrison, Hollywood, Calif.

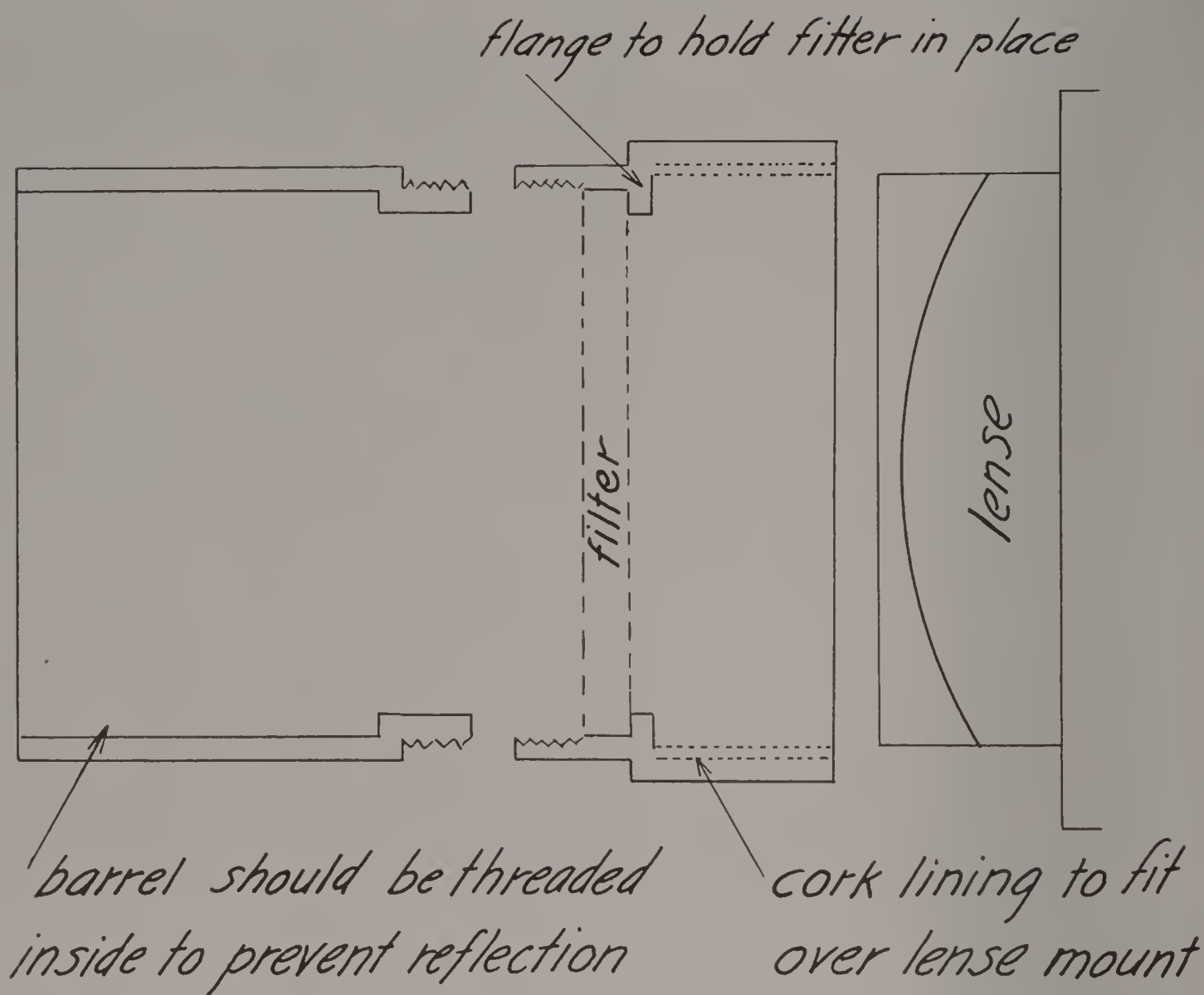


Figure 19

and the superiority of the photo-electric cell type is, I think, generally conceded. The ability to judge exposures can be developed to a remarkable degree by experience, but the faculty is of doubtful value unless the photographer is working under precisely the same conditions every day. Some professional photographers refuse to have anything to do with exposure meters, and I have often suspected them of being afraid to admit that they do not know the correct exposures. The man who makes outstanding portraits will not hesitate to use unusual lighting effects and by the same token he will use an exposure meter to produce better negatives.

### *The Sun Shade*

No experienced motion picture cameraman would think of operating a camera without a sun shade. Why the average photographer



is so careless in this respect has always been a mystery to me. It is not enough to protect the lens from the direct rays of the sun or artificial lights, for quite as much damage can come from reflected light from objects near the camera and particularly from pavements and polished floors.

Sun shades for lenses of average size can be turned on a lathe, by a competent mechanic, from brass or bronze tubing. The flange that fits over the lens should be lined with a thin strip of cork to avoid scratches which might result from placing metal against metal, and to provide a means of absorbing the expansion and contraction of metals due to temperature changes. The inside of the shade should be threaded and painted black so that stray shafts of light will not be reflected into the lens. I have a sun shade made in two parts, with a flange to hold circular Wratten filters in place. (Figure 19.) The shade, if made to order, should be as long as it is possible to use without cutting the corners of the plate. The actual length will vary according to the focal length of the lens with which it is to be used.

## CHAPTER THREE

### Principles of Lighting

I shall endeavor to analyze the fundamental principles of lighting as a foundation for their application to various types of portrait subjects which will be discussed in later chapters. It would be comparatively easy to work out a system with the number, type and power of lighting units specified. But systems imply standardization and when that idea is carried too far art flies out of the window. A system based on sound lighting principles is all right for a photographer who has developed a style and who specializes in a particular kind of portrait. But with the possibility of literally hundreds of variations from the basic lightings there is no need for any photographer to adopt someone's standardized system. In this connection I think what I wrote in a recent issue of "Camera Craft" is worth repeating.

"The first and in my opinion the most important accomplishment of the portrait photographer is to develop a style or technique by which his work can be identified among a group of photographs. It is a matter of common knowledge that the works of great painters have been identified hundreds of years after the death of the artist by the technique which is characteristic of each man's work. There are photographers living today whose style is so familiar to most of us that we can name the photographer by looking at his pictures. The possibility that it may require several years to perfect a style

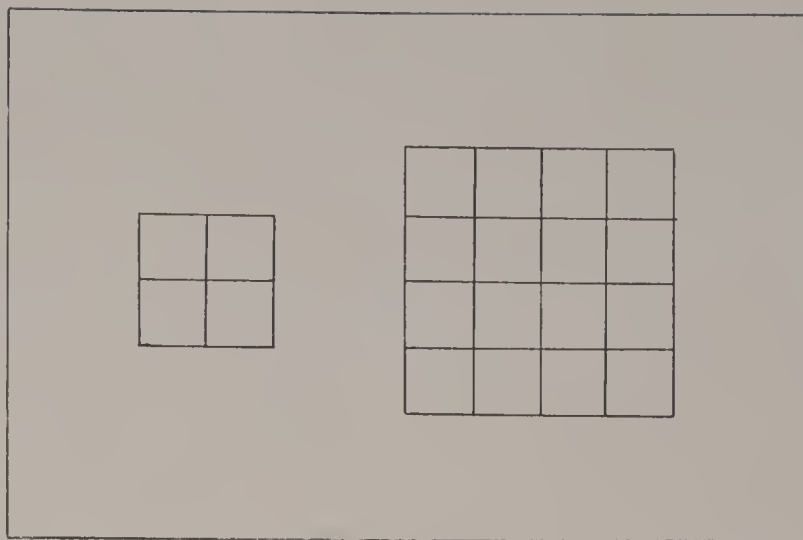


Figure 20

will not discourage those who have the necessary courage, intelligence and energy to make a success of portrait photography.”

The best advice I can offer is—read everything available on lighting, study the motion picture, exhibitions of painting and other art mediums; but stick close to fundamentals and develop your own lighting system.

### *The Law of Inverse Squares*

No photographer can ignore the laws of light and escape the consequences. Everyone who uses artificial light should have this fundamental law engraved in his memory.

*The intensity of light varies inversely as the square of the distance from the light source.*

Reduced to everyday language it means that light projected from a given point covers a larger area as the distance from the source of light is increased. If, for example, a light two\* feet from the subject is moved to twice that distance (4 feet) the light value will be decreased to one quarter because the light is distributed over four times the area. (Figure 20.) It is evident that in such case it would be necessary to increase the exposure four times to compensate for the difference in light value.

Another way to explain the operation of this fundamental law is to say that one 1000 watt lamp at two feet delivers as much light

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\*In actual practice a lamp would never be used as close as two feet from a subject.



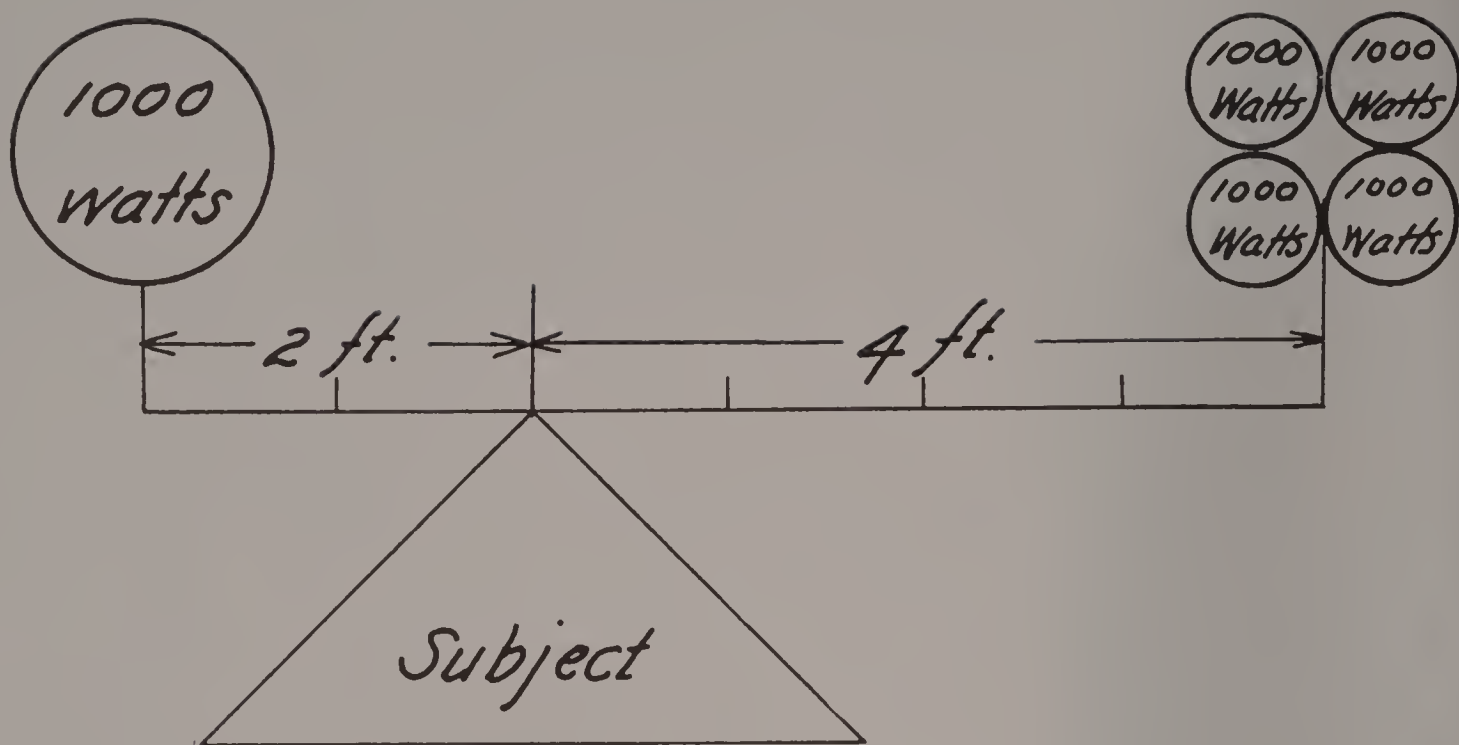


Figure 21

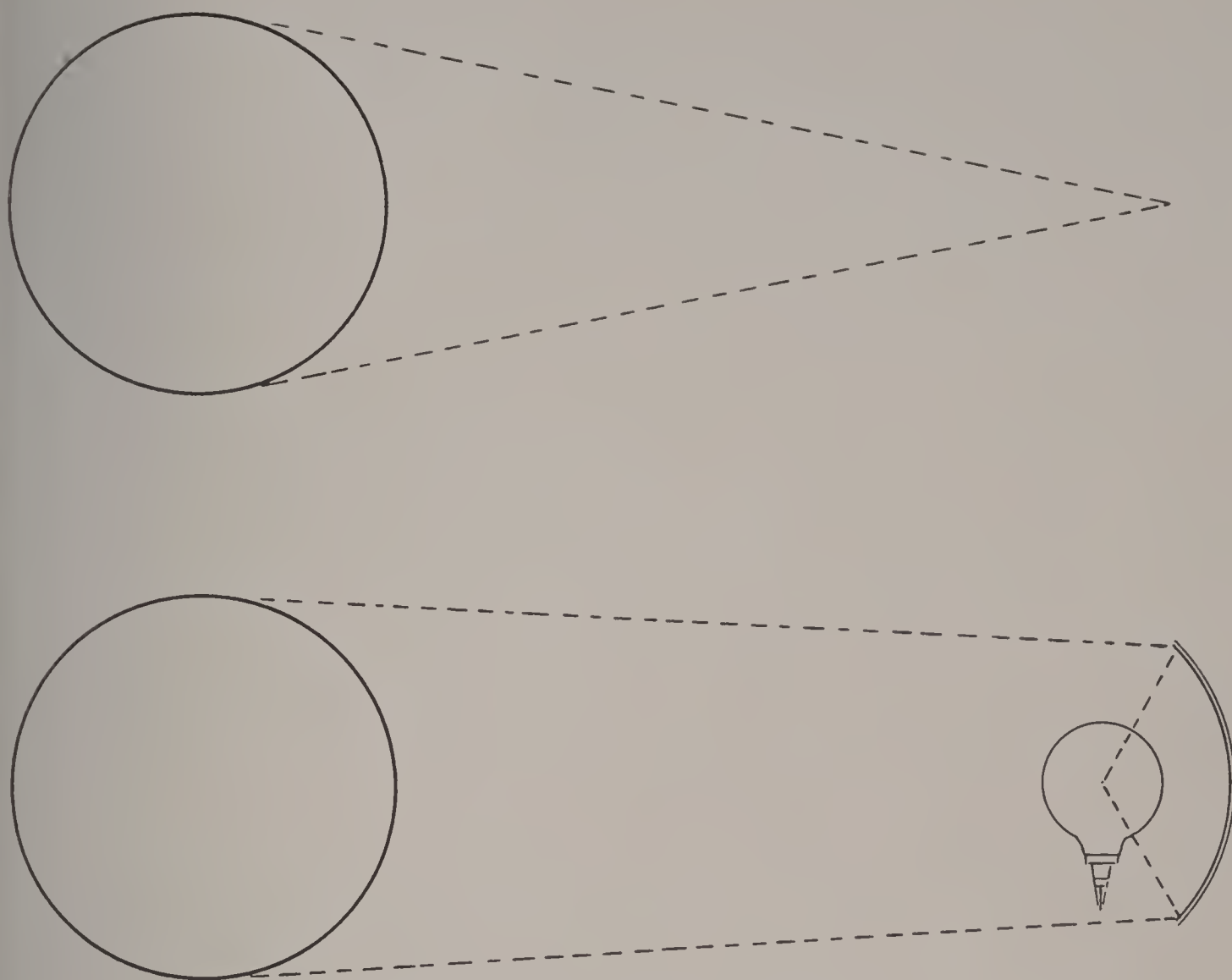
value as four 1000 watt lamps at four feet. (Figure 21.)

#### *Distance From Lamps to Subject*

The studio should be equipped with lamps of sufficient power so that they can be operated at a comfortable distance from the subject. When lamps are too close some subjects seem to “wilt” under the glare and heat. On the other hand the lamps should not be used so far away as to require an excessive number of lighting units or prolonged exposures.

I have always considered it a mistake for a writer to specify an exact distance from lamps to subject because no one can hope to make successful portraits until he learns to judge for himself the proper distance from lamps to subject for the particular equipment which he uses. Faces and poses are seldom enough alike so that a lighting set up which would fit one face and pose would also fully fit another. Equipment and sensitized materials are constantly changing, and instructions which might be correct today might be totally unsatisfactory under changed conditions.

Certainly anyone sufficiently interested in portraiture to read a book of this kind must own an exposure meter or at least should have enough experience to calculate exposures.



*Figure 22 (top). Figure 23 (lower).*

Manufacturers of certain kinds of lamps publish diagrams and show distances from lights to subject in their advertising, even giving exposures but such instructions are intended only for the layman. The manufacturer protects himself by specifying the kind of film and the lens aperture and he can safely assume that the camera used will not require calculations for increased exposure due to bellows extension.

Some photographers hold that lamps operated close to the subject emphasize roundness and form while others argue that distance is an advantage, pointing out that light projected from distance gives a truer rendering of form.\*

The latter theory is commonly illustrated by a diagram of a sphere lighted from a distant source. (Figure 22.) The weakness

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\*I speak of form in the sense of imparting a three dimensional quality to the photograph by means of a precise gradation of light and shade.

of this theory is that a *point* source of light is assumed when as a matter of fact nearly all artificial light is gathered by some sort of reflector behind the lamp and projected toward the subject. (Figure 23.) A spotlight is the nearest approach to a point source of light but the most efficient spotlights are equipped with reflectors. When lamps are used very close to the subject the result is brilliant high-lights and deep shadows. The strong contrast between the high-lights and shadows gives the impression of roundness but this result should not be accomplished at the expense of the subject's comfort. With lighting equipment of the type described in Chapter 2 of this book it is unnecessary to work closer than six or eight feet; with spotlights at a greater distance from the subject. Contrast between high-lights and shadows can be obtained by the manipulation of the lamps in height and position in relation to subject and camera.

### *Diffusion of Light.*

I have worked with "raw" light for years and diffusion, to me, seems a useless waste of light. If the material used for diffusion is really effective it is obvious that the lamps must either be moved nearer to the subject or the exposure increased to compensate for it.\* Tracing cloth, for example, reduces the light value 50 to 55%. For the benefit of those who insist on diffusion Cello Glass\*\* is recommended. It is more transparent than tracing cloth and is not affected by heat.

Diffusion is used to eliminate glare and to obtain a soft light. I prefer to obtain the same end by keeping the lights high enough so that they will not strike the subject directly in the eyes and by moving them as far from the subject as possible without causing prolonged exposures. A subject occasionally complains about the brightness of lamps but this is mostly imagination and if the situation is handled properly it will soon be forgotten.

The artificial light in the average studio is not nearly as bright

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\*William Mortensen's lighting methods, as well as his photographic objectives differ in several respects from my own. It is interesting to note, however, that in his book, "Pictorial Lighting," Mr. Mortensen advocates the use of undiffused light in order to obtain a desirable "crispness" in the highlights.

\*\*Cello Glass is wire screen impregnated with cellulose acetate.



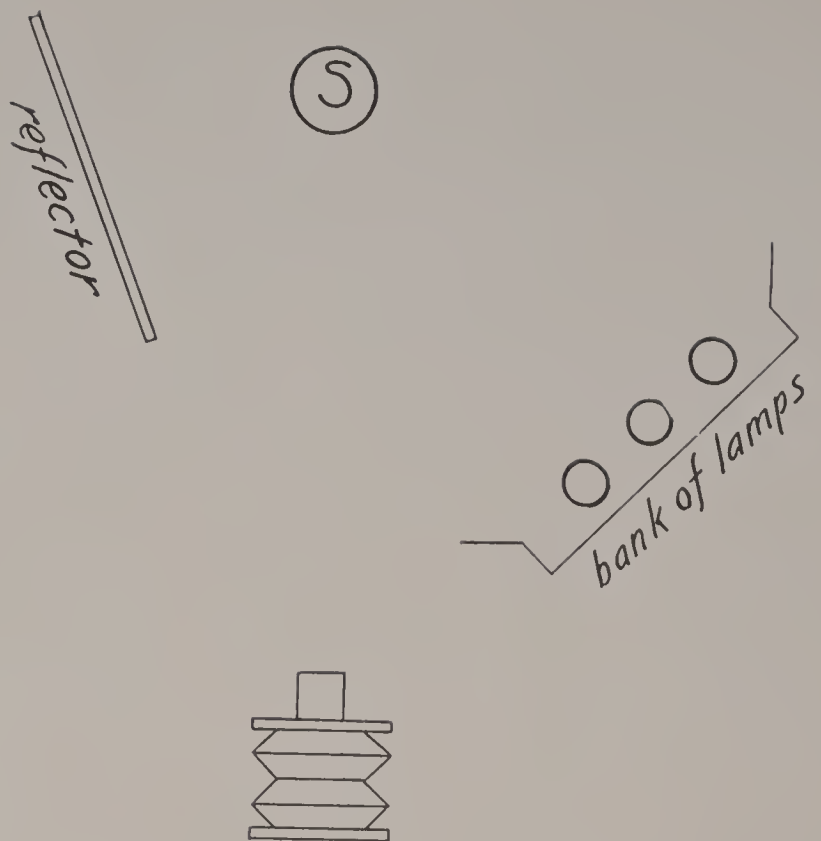


Figure 24

as sun light and the average person suffers no discomfort from sun light. Children can be photographed with 1500 watt lamps without diffusion, with no apparent discomfort but if they hear parents or the photographer discussing the brightness of the lamps they immediately become conscious of them.

### *The Main Light*

The location of the lamp or lamps comprising the main light source, in relation to the subject or scene, is the most important factor in producing a successful photograph with artificial light.

There are two separate and distinct methods of procedure in the placement of the main light. The method that is most frequently used is to place the main light source in the desired position and to balance it with reflectors or secondary lights. The other method is to light the subject or scene with flood lights so that detail will be visible, when desired, in the shadows and then, by the use of spot lights or other high intensity units, provide what in effect is the main light source. The most satisfactory method depends largely upon the type of subject or scene and upon the working habits of the photographer.

In general, however, the placement of the main light source first is the most satisfactory method for single figure portraits. The other method is commonly used on large sets and in studios where considerable equipment is available or necessary.

### *Secondary Illumination*

In many respects the secondary illumination of the modern studio is comparable to the reflected light of the old daylight studio. Reflectors were used to balance the light from the main light source, a skylight. (An equivalent set-up is shown in Figure 24.) In the modern studio floodlights are used instead of reflectors to balance the lighting.

Secondary illumination has an important bearing on exposure. The light value can be built up by control of the distance from lights to subject so that detail will be visible in the shadows at the exposure desired. We have, as a matter of fact, little choice in regard to exposure times for portraits. From one-fifth to one-half second is about the *maximum* exposure for adults; this is much too long for children. Exposures should never be prolonged to the extent that instructions to "hold it" are necessary. A standing figure will "sway" so slowly that the motion is almost imperceptible to the eye but if the exposure is too long the negative will have a "fuzzy" appearance.

The monotone filter and the exposure meter are invaluable aids when the shadows are being lighted and the secondary illumination of the picture arranged. The monotone filter shows how much detail will be recorded in the shadows and the exposure meter indicates the exposure necessary to record the detail. If the meter shows the required exposure to be too long the lights can be moved toward the subject until detail in the shadows is within the desired exposure range.

### *Forty-Five Degree Lighting*

Unquestionably the so-called "45°" lighting is the most commonly used of all lighting schemes. It is the accepted lighting method in art schools and it has been used by painters and sculptors

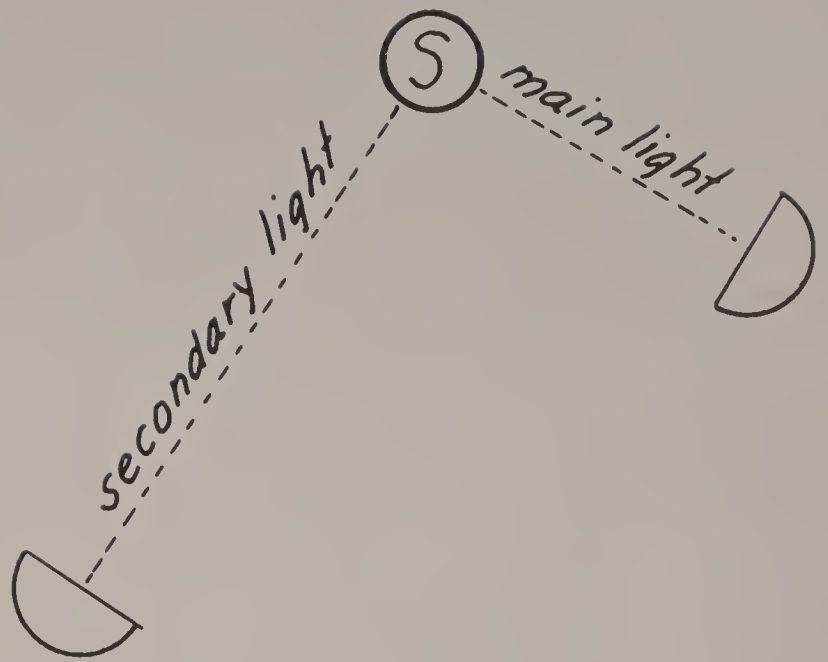
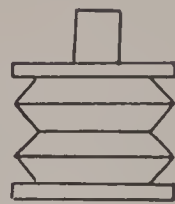


Figure 25



for hundreds of years. Its chief virtue is the delineation of *form*, to which photographers should devote far more of their attention.

There are many interpretations of  $45^\circ$  lighting among photographers. Some habitually work with lights “unbalanced” for contrast and others take a middle course with lights balanced to produce a “flat,” even effect. Professional photographers who make portraits can generally be distinguished from the fellows who are only interested in the contents of the subjects purse by the *character* of the lighting, for good lighting has character and bad lighting has none. Outfits working rackets of various kinds have a sort of mass production system for herding the boobs through the turnstiles and the lighting is usually from an artificial skylight composed of a bank of lamps. It is always large and close enough to the floor to hit the subject right in the face and to make sure that the shadows don’t get out of control, and lend some interest to the picture, a reflector about the size of a barn door is anchored nearby.

The better photographers use lighting units with reflectors designed to project the light over a comparatively small area. The Rifle Lamp shown in Figure 14 serves the purpose admirably. One



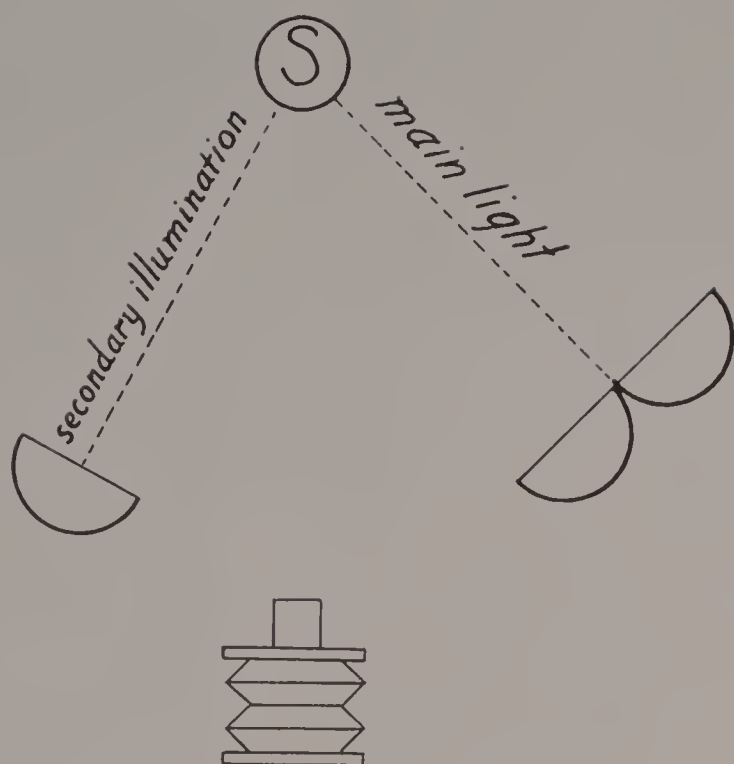


Figure 26

unit supplies the  $45^\circ$  main light and the other, on the shadow side but farther away from the subject, is for secondary illumination. (Figure 25.) Another method (Figure 26) if sufficient equipment is available, is to use two lamps for the  $45^\circ$  main light and one lamp about the same distance from the subject on the shadow side for secondary illumination. Both Figure 25 and Figure 26 show the lamps on the same angle in relation to subject and camera. In actual practice, lamps are seldom used at an angle of precisely  $45^\circ$  from the subject for reasons that will presently be explained. The distance from lights to subject will, of course, vary with different sizes and types of lamps and according to the kind of film used and exposure required.

The position or angle of lights in relation to subject and camera is different for each portrait subject. I have always considered the location of a piece of lighting equipment as a *zone* within which the unit may be moved to obtain the desired effect and to increase or decrease the indicated exposure. Experience crystallizes the working habits of a cameraman until he follows an orderly system of arranging the lights, and the *zones* for various units are as accurately established in his mind as if marked on the floor with chalk. Sometimes the “zone” for the main  $45^\circ$  light is on the left of the subject and the secondary illumination zone on the right and vice versa. In either

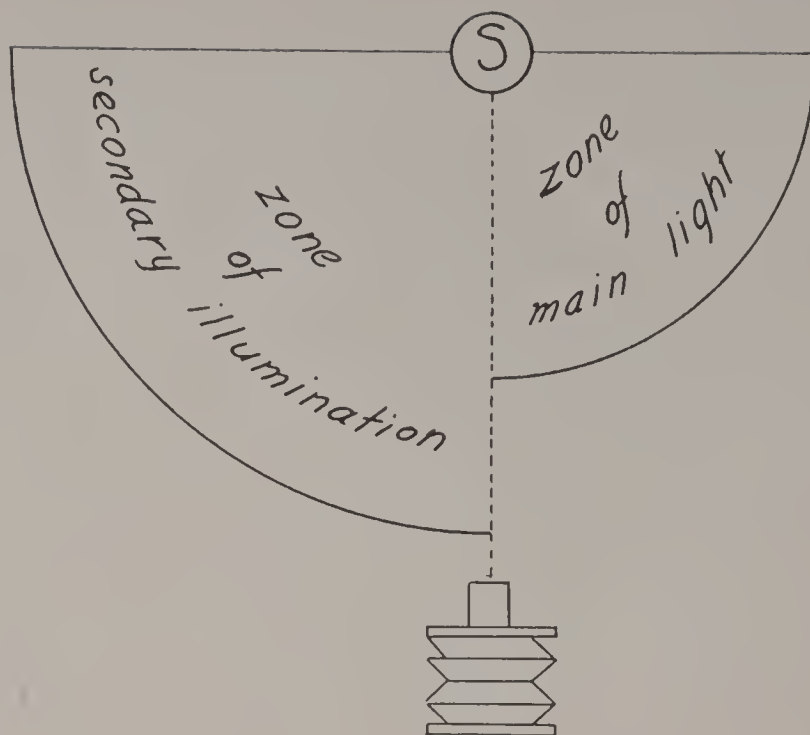


Figure 27

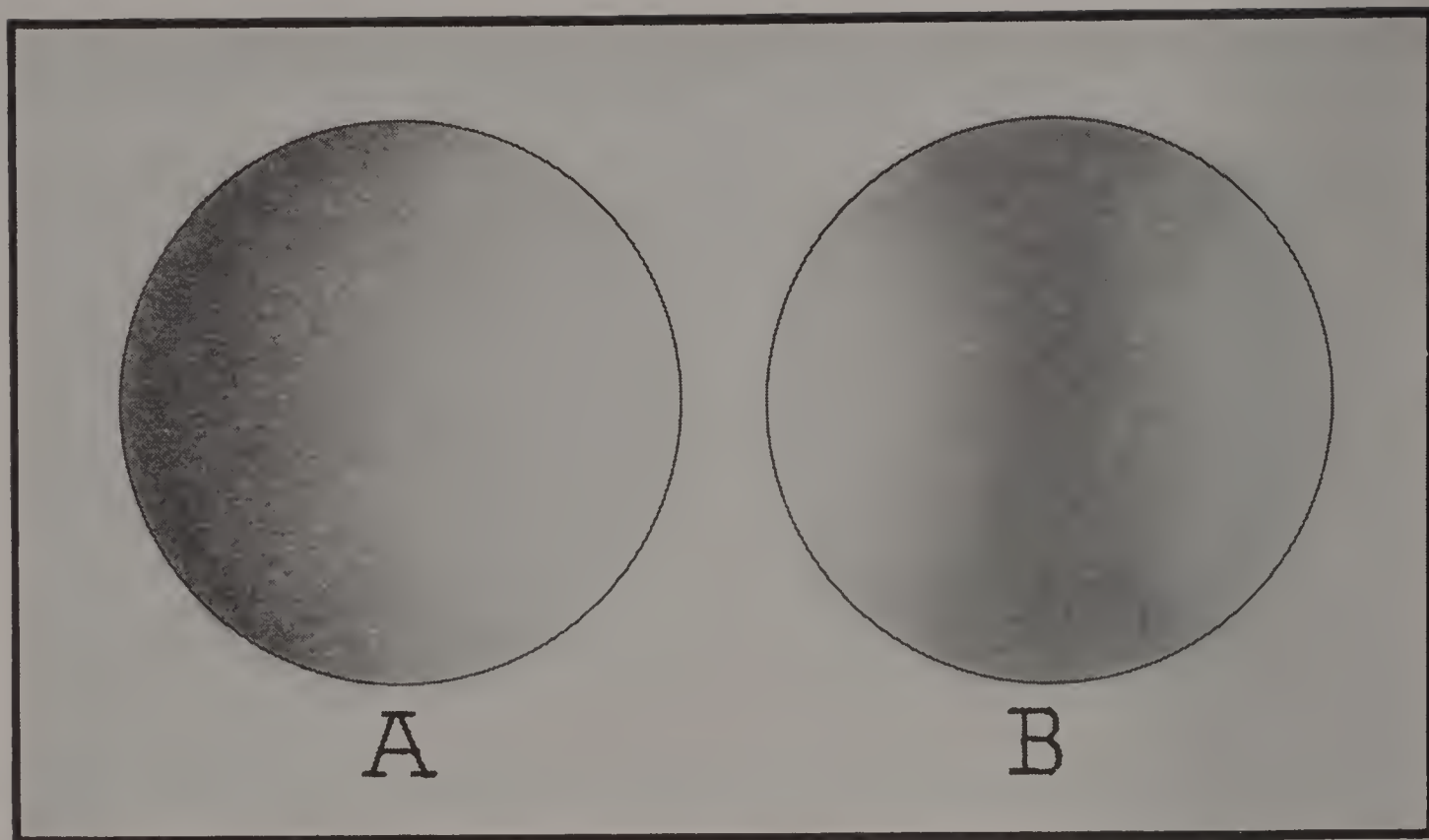
case the method of working is identical and the choice of position for the main light depends entirely upon which side of the subject's features are best or upon the pictorial composition of the portrait.

To illustrate the zone idea I have prepared a floor plan based on the  $45^\circ$  lighting shown in Figure 26. (See Figure 27.) Instead of showing the lights in a particular spot, two "zones" have been established and we are ready to discuss the location of the lamps within the zones. The fundamental principle which must always be kept in mind, is that lights used in that portion of the zone in *front* of the subject produce *flat* lighting\* and as the lamps are moved into the portion of the zone to the *side* of the subject the result is *contrasty* lighting. (Figure 28.)

For the average subject the main light will be located at an angle of about  $45^\circ$  from an imaginary line drawn from subject to camera and the lamp for secondary illumination will be located at approximately the same angle on the opposite side of the camera. (Figure 26.) The direction in which the subject faces in the various poses will, of course, dictate the position of the lamps.

The light for secondary illumination should balance the lighting, and it must not be located so far to the side of the subject as to make it apparent that two separate and distinct sources of light are being

\*An important exception will be noted in the chapter on Hollywood Portraits.



*Figure 28-A*

*The result of having the secondary illumination or a reflector too far to the side is shown in B above. Notice that there appear to be two conflicting sources of illumination, and that the center area is poorly lit. When the lights are properly arranged the illumination diminishes gradually from highlight to shadow, as in A.*

used. Rather the secondary illumination should act as a continuation of the main light by carrying the illumination further around the subject than would be possible with the main light alone. (Figure 28-A.)

With the subject standing or seated in the approximate pose desired, the lamps can be adjusted for height. (Figure 29.) When the  $45^{\circ}$  main light is properly located it will throw a shadow from the tip of the nose to the corner of the mouth. This also highlights the cheek on the shadow side and gives form and roundness to the features. (Figure 30.) It is just as important and logical to consider the height of lamps in relation to the subject as a “zone” as it is to treat the floor layouts by the “zone” method. (Figure 31.) A great variety of effects are obtainable by the intelligent manipulation of



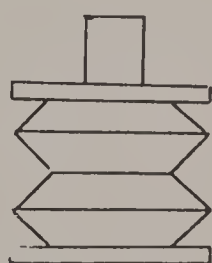
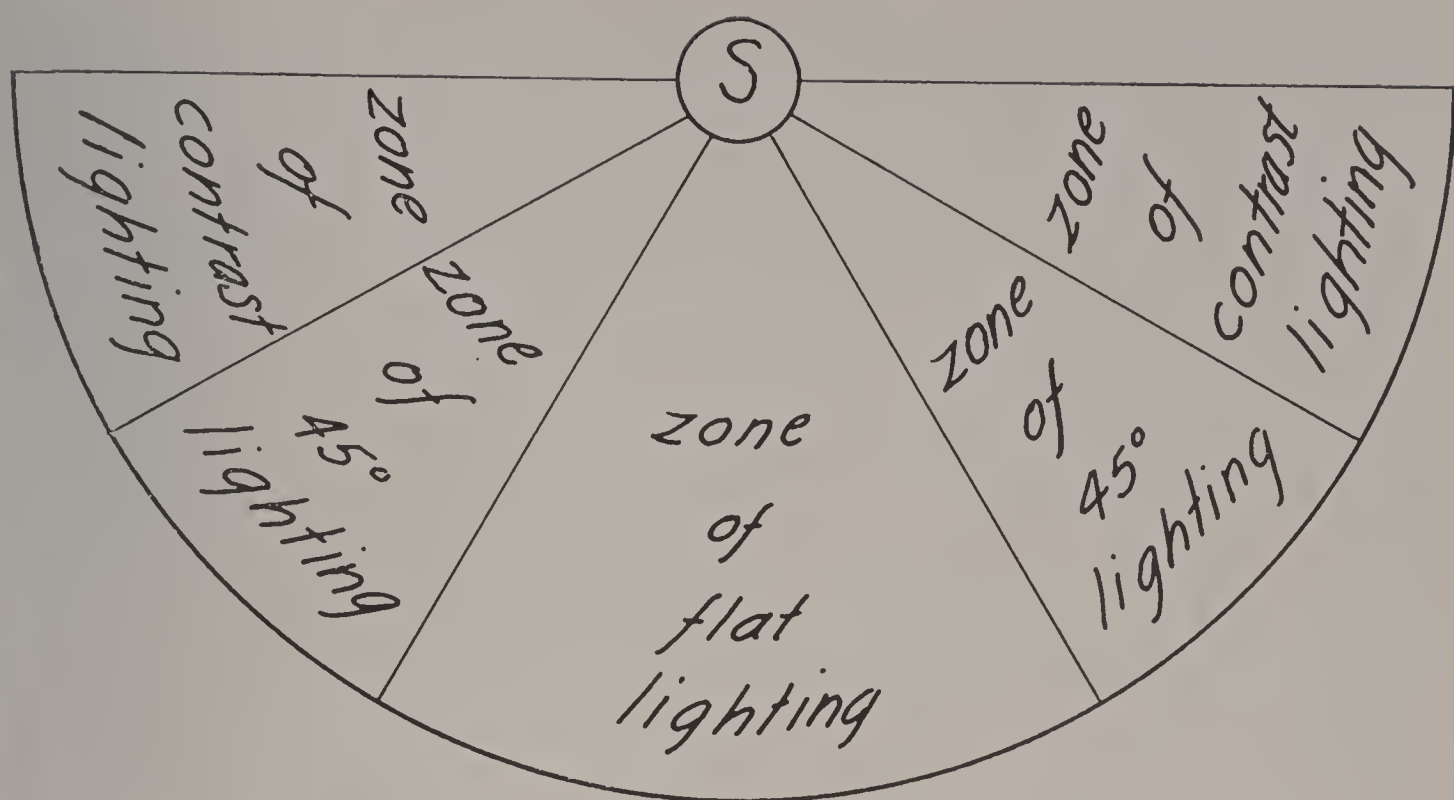


Figure 28

the height of the lamps. *Flat* lighting is the inevitable result of having lamps too low. Raising the lamp so that the light is projected downward from about a  $45^\circ$  angle gives a more pleasing effect. Elevation of the lamp above the  $45^\circ$  angle into the top of the zone produces *contrast* and often a striking picture but calls for sound judgment in the selection of subjects. Contrast lighting, if it gets out of control, is one of the most unsatisfactory methods of making a portrait.

Chief among the causes of downright bad photography is flat lighting, most of which is entirely unnecessary. The principal offenders are photographers who work with more or less fixed light

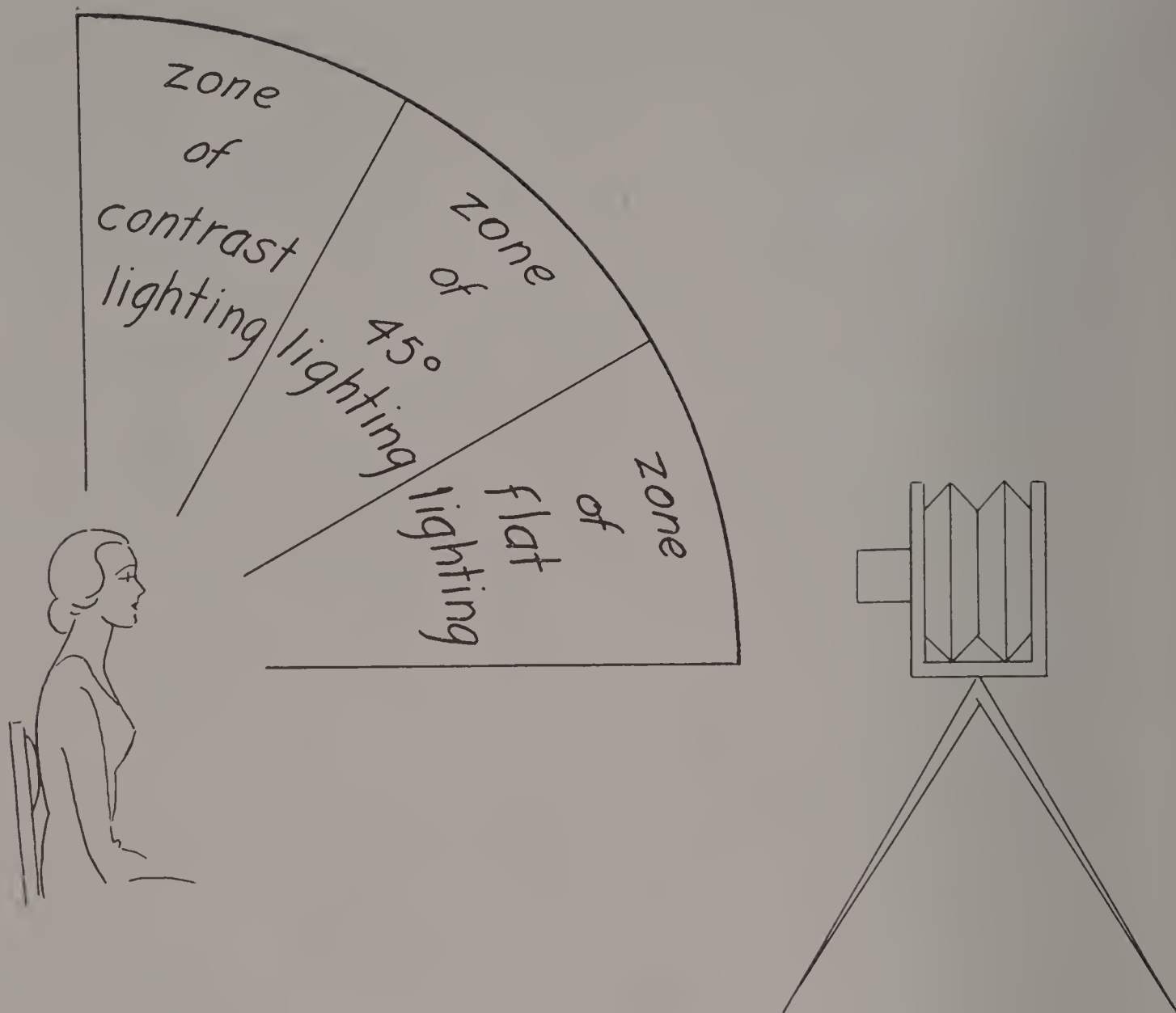


Figure 29

sources. When two lamps are used, one as a main and the other as a secondary light source, it is very easy to obtain a correctly lighted portrait by exercising care and judgment in moving each lamp to its proper position.

The photographer who uses the zone method of locating lighting units has a decided advantage because the position of each lamp and the reason for it is clearly established in his mind.

The type of subject must always determine the position of the lamps. For example, if the subject is a man of middle age with normal features, the main light source will be placed in the 45° zone and its height will be adjusted for a 45° lighting. The secondary light will be placed in a similar position in a zone on the opposite



*Figure 30*



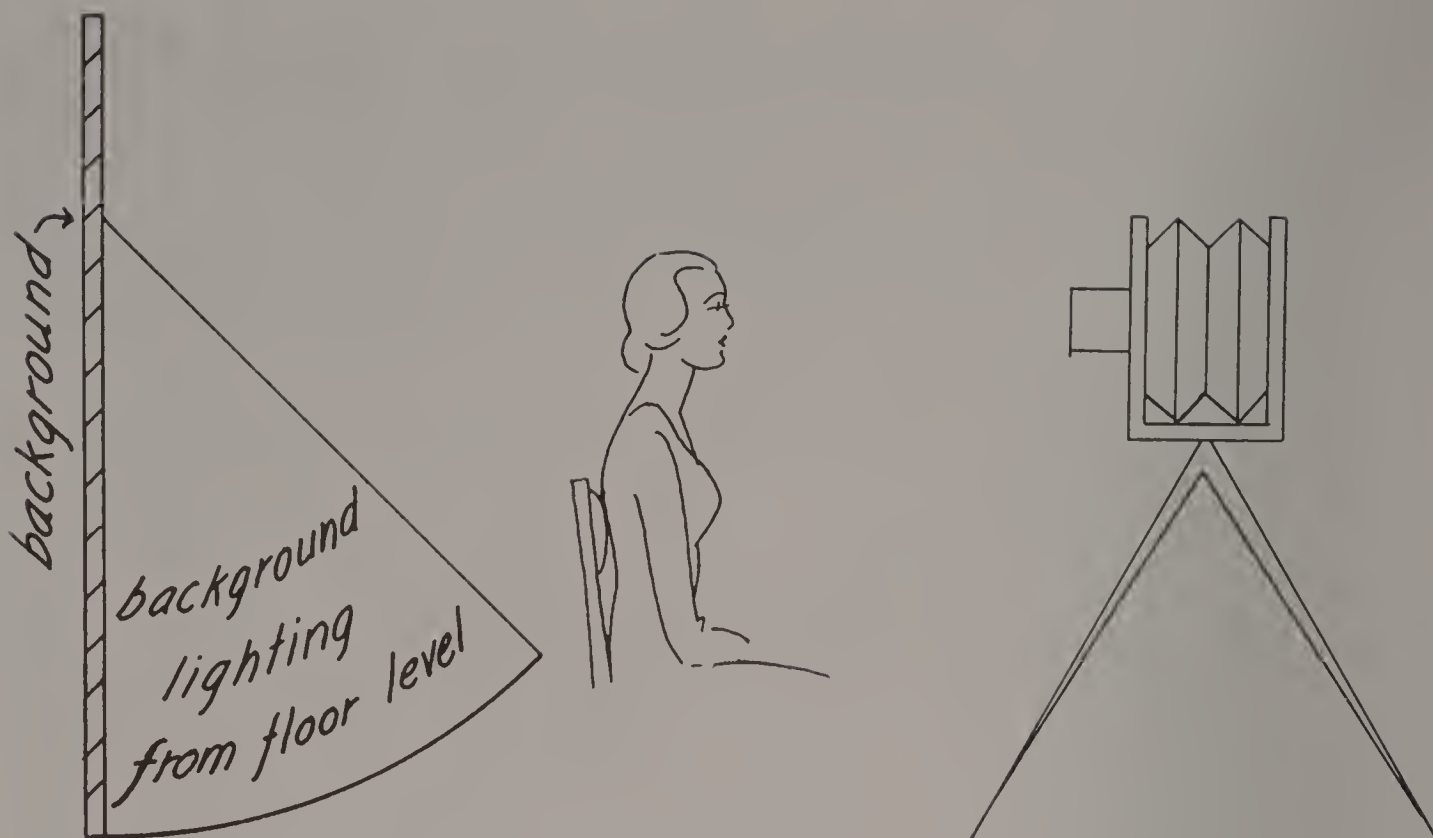


Figure 31

side of the subject. Of course a variety of poses and lighting may be used for the average subject, but the position of the lamp in a given zone depends upon the subject type, man, woman or child, young or old, fat or thin, etc. The chief virtue of artificial light is the factor of *control* and this advantage should be utilized to the utmost in placing lighting units in position. If shadows are too pronounced, over-emphasizing the bone structure of the subject's face, lower the main light and place it more directly in front of the subject. If the lighting is too flat, move one or both lamps toward the contrast region of the lighting zones.

### *Background Lighting*

My earliest recollection of portrait studio backgrounds is of painted scenic effects rivaling theatre curtains in grandeur and lacking only the painted advertisements of local stores, hotels, and chop houses. Backgrounds in the modern studio are few in number and extremely simple. Pictorial effects, if attempted at all, are obtained by lighting.

The function of background lighting is to separate the planes of



Figure 32

the picture, improve the aerial perspective,\* and establish the tone of the background. The camera sees with “one eye” (the lens) and no photograph can be three-dimensional unless it is made with two synchronized lenses and the prints, mounted a little distance apart, viewed with an optical instrument equipped with an eyeglass for each eye.\*\* The tendency of the camera to reduce the scene to a single plane can be overcome to a certain extent by background lighting.

Background lighting should always be considered an essential part of the lighting scheme and just as important as lighting the subject. It must, however, be done with separate lighting units.

In general, it is my practice to establish the tone of the background, especially when white or very light tones are required, by means of the overhead strip. If it is only necessary to separate the subject from the background, a light from floor level is used.

Backgrounds fall within three general tone classifications, black, white and neutral. The word “neutral” has a very broad interpretation among photographers but here it is intended to mean gray or a color that will have a similar tone value in the photograph.

There is no lighting problem involved when a black background is used because a deep velvet *black* can only be obtained by the *absence* of light on the background.

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\*The aerial perspective of painters is the expression of space by gradations of color, distinctness, etc. Webster's Dictionary.

\*\*Stereoscope.

If the background is heavy velvet or velour, it will not reflect light directed on the subject, particularly if the subject is separated from the background by a distance of about five feet.

A gray background used in a studio where *all* of the light in the camera room is under control will furnish a range of tones from gray to almost black depending upon the amount of light projected upon it. A gray background cannot, of course, photograph darker than it actually is except in a room with every window covered, where there is no reflected light from walls, and where all of the light used on the subject is projected from equipment free from leaks or “spills” of light. Except in occasional instances when jet black is essential a gray background serves the purpose for all low key portraits. Illumination of the entire background is seldom required particularly for single figure portraits. (Figure 31.) The lighting, to separate the subject from the background, should be projected from a point as near the floor as possible. (Figure 31.) For this purpose a spotlight equipped with a table base is excellent. (Figure 32.) Some spotlights have demountable heads so that they can be set in a pivot on the base. An ordinary spotlight can be used for many background lighting effects but most units are mounted on pedestals which cannot be telescoped lower than four or five feet from the floor thus making it difficult to obtain the desired result. A round spot of light should not be projected on the background directly behind the subject’s head for this suggests a “halo.”

### *White Backgrounds*

White backgrounds are in keeping with the modern trend in architecture and interior decoration. The portrait photographer who has initiative and a knowledge of composition can create some beautiful portrait settings by using modern furniture properly lighted. (Figure 33.) An abundance of light projected evenly over the entire background surface is an absolute necessity.

Whether the background is lighted from overhead strips, platform lights or floodlights on pedestals, the problem most likely to be encountered is “spotty” or “uneven” illumination. If the lamps





*Figure 33*

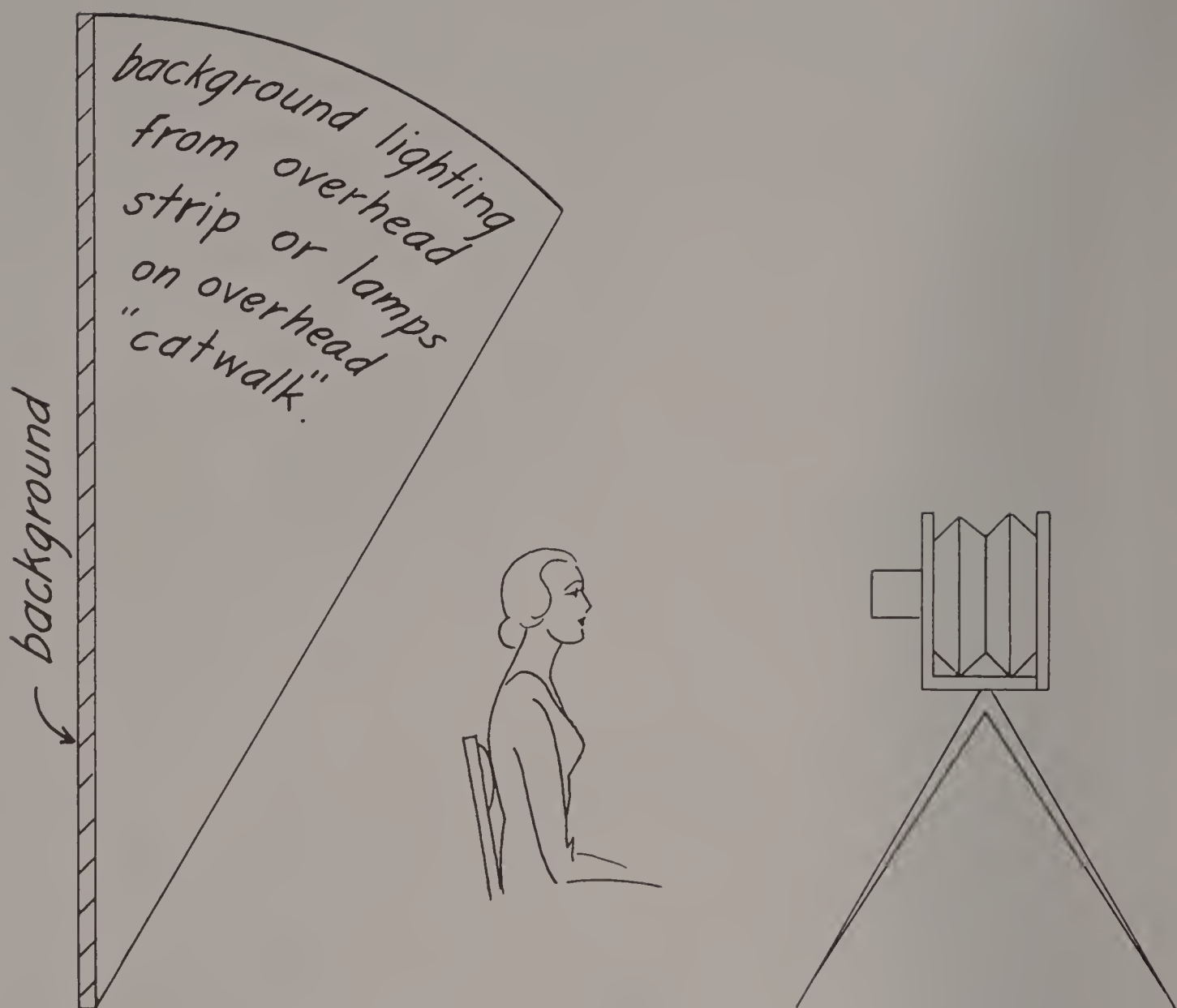
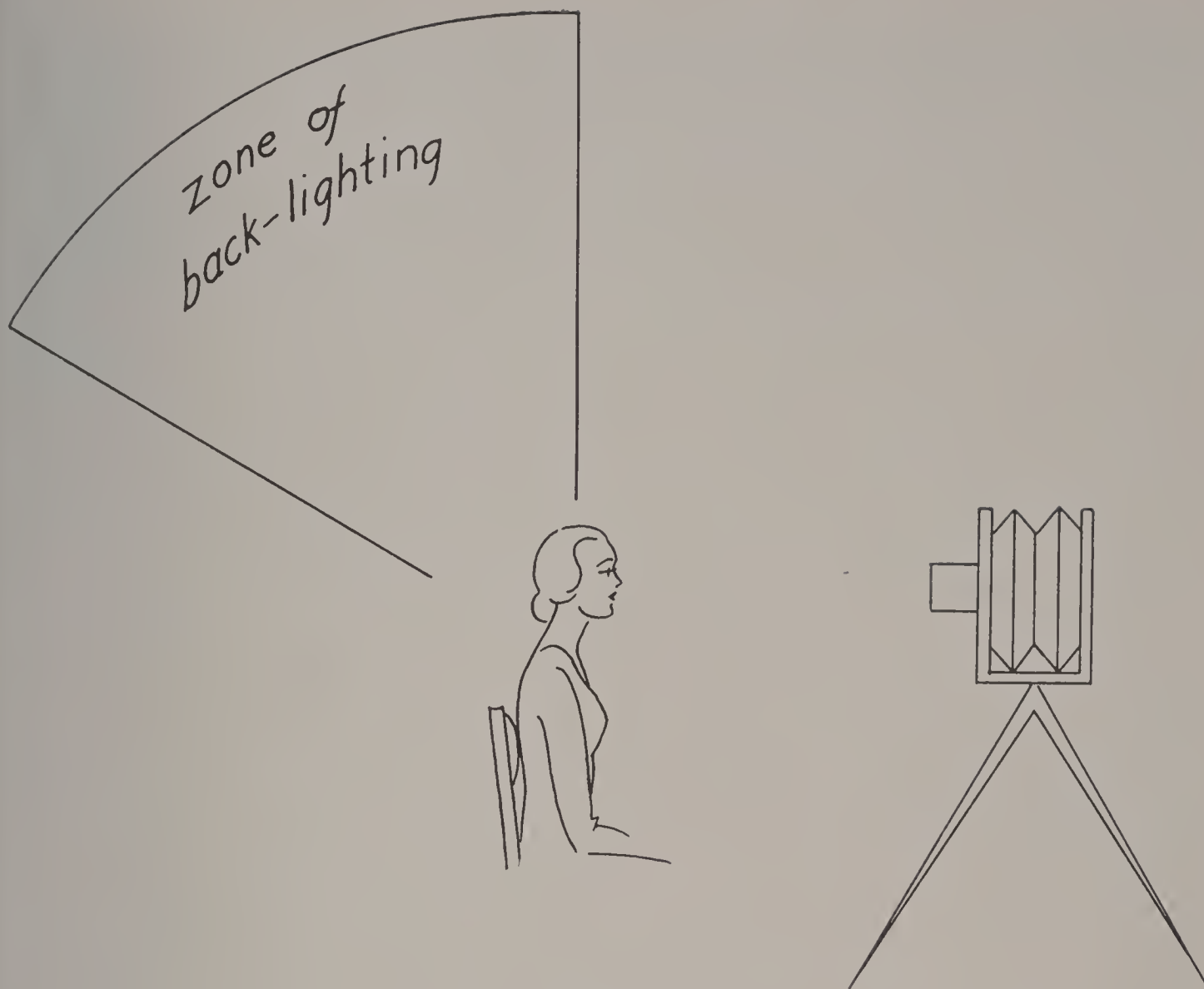


Figure 34

are too high or if the light is projected downward at a sharp angle the lower portion of the background will be insufficiently lighted, the negative under-exposed, and that portion of the print a dirty gray instead of white. A proper distribution of background lighting is shown in Figure 34. Small background surfaces such as screens can be lighted effectively enough with floodlights but when a large surface is used there is likely to be trouble. The background in Figure 33 is twelve feet long and ten feet high, an area of 120 square feet. The overhead strip with 7500 watts in ten reflectors provided *uniform* background lighting. An equal amount of light from floodlights or floor pedestals could not produce the same effect because, obviously, the lamps themselves would show in the picture if placed in the positions necessary to cover the background evenly.



*Figure 35*

The background just described is large enough for standing figure portraits, groups and interiors with furniture and accessories. For large heads, home portraiture and pictures of children a portable background can be made of plywood and finished with kalsomine like the background described in Chapter 1. A panel four by five feet lighted by about four photoflood lamps will serve nicely for large heads and close-ups of children. Photoflood lamps are suggested because they produce the brilliant light necessary for white backgrounds with a minimum consumption of electric current. The one objection to photofloods is that they burn out very quickly. A large number of pictures can be made with a set of photofloods by burning them only for short periods. When photofloods are used the subject should always be lighted with separate lighting units so there is no necessity of burning background lights except during the actual exposure.





Figure 36

### *Back Lighting*

The term “back lighting” should never, under any circumstances, be confused with background lighting for there is no connection whatsoever. “Back lighting” refers to light projected upon the *subject* and not upon the background. (Figure 35.) It also describes the kind of lighting effect that is obtained outdoors by “shooting” into the sun. It is one of the most popular of all lighting schemes in motion picture photography. For back lighting studio shots powerful spotlights or “Sunspots” are used on overhead platforms or from pedestals on the floor. In either case the light is projected downward at angles varying from about  $45^{\circ}$  to almost straight down but *always* from a source *back* of the subject or scene—therefore the expression “back lighting”. Back lighting is extensively used to separate the planes and to accent a particular part of the picture. It is often used to give relief to a figure posed against a dark or black background.

### *Special Effects—Dramatic Lighting*

The basic principle of all spectacular effects is that a powerful beam of light is projected from an *extreme angle*. The success of many magnificent characterizations by the late Lon Chaney depended upon dramatic lighting. When the Hollywood boys set out to really freeze the movie fans to their seats with horror they use



*Figure 37*



*Figure 38*





*Figure 39*

a concentrated light on the floor, *directly below* the actor's face. (Figure 36.) This throws heavy shadows from the chin and nose *upward* and the eyes appear to be dilated. This is the technique used in some of the thrillers starring Boris Karloff and Bela Lugosi.

The advisability of using this kind of lighting is a question that each photographer must decide for himself but it is safe to say that the portrait subjects for whom dramatic lighting is ideal are not often encountered. Outside of theatrical circles dramatic lighting is more successful with women than with men but subjects should be selected with discretion. (Figure 37.)

In order to produce deep shadows and sharp contrasts spotlights and "sunspots" are favored for the main light source in dramatic lighting. Frequently they are used on platforms almost directly overhead. The floor units are operated from the contrast region of the main light zone.

### *Accent Lighting*

Studio portraits particularly of low key subjects should be relieved by accent lighting. Spotlights are commonly used for this purpose because they can be focused to high-light the hair, face or figure. Many subjects do not need this kind of lighting because some part of the costume may furnish just the accent required. For example, the low-key portrait of a man in Figure 38 needs no special lighting because the white collar serves the purpose. On the other hand the portrait of a blonde girl against a black background is greatly improved by a spotlight on her hair. (Figure 39.)

Accent lighting, properly managed, does not increase the tone scale of the picture and is of secondary importance in exposure calculations. Accent lighting does not lengthen the continuous scale but usually is an isolated note in a higher key. Above all it must be in harmony with the *composition* of the picture.

In this connection let me warn the reader against the excessive use of spotlights. Although spotlights are essential equipment for the modern studio they are by no means necessary for the making of *every* portrait. Small spotlights (250 to 500 watts) are extensively used for high-lighting the hair and "modeling" but the

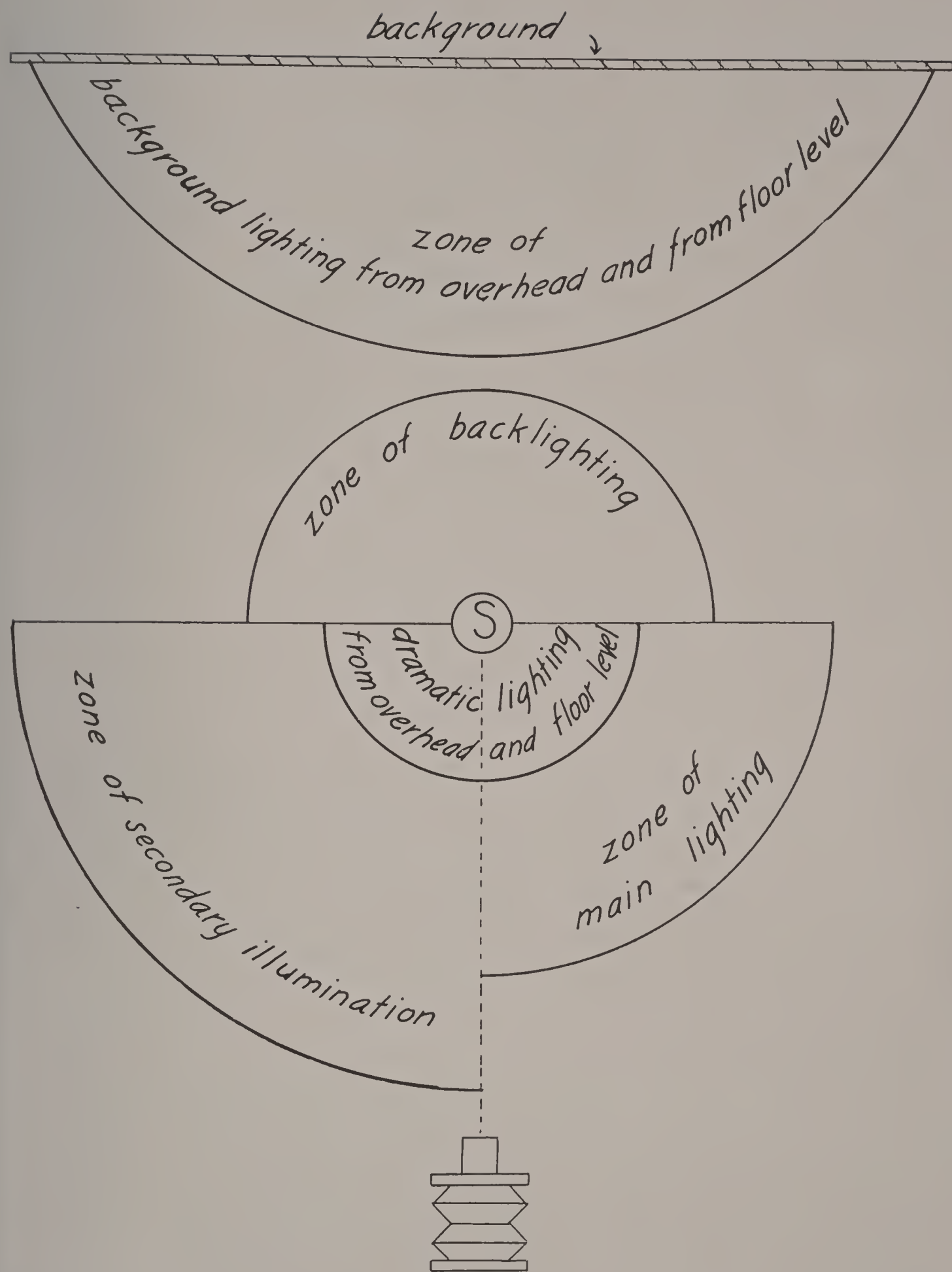


Figure 40



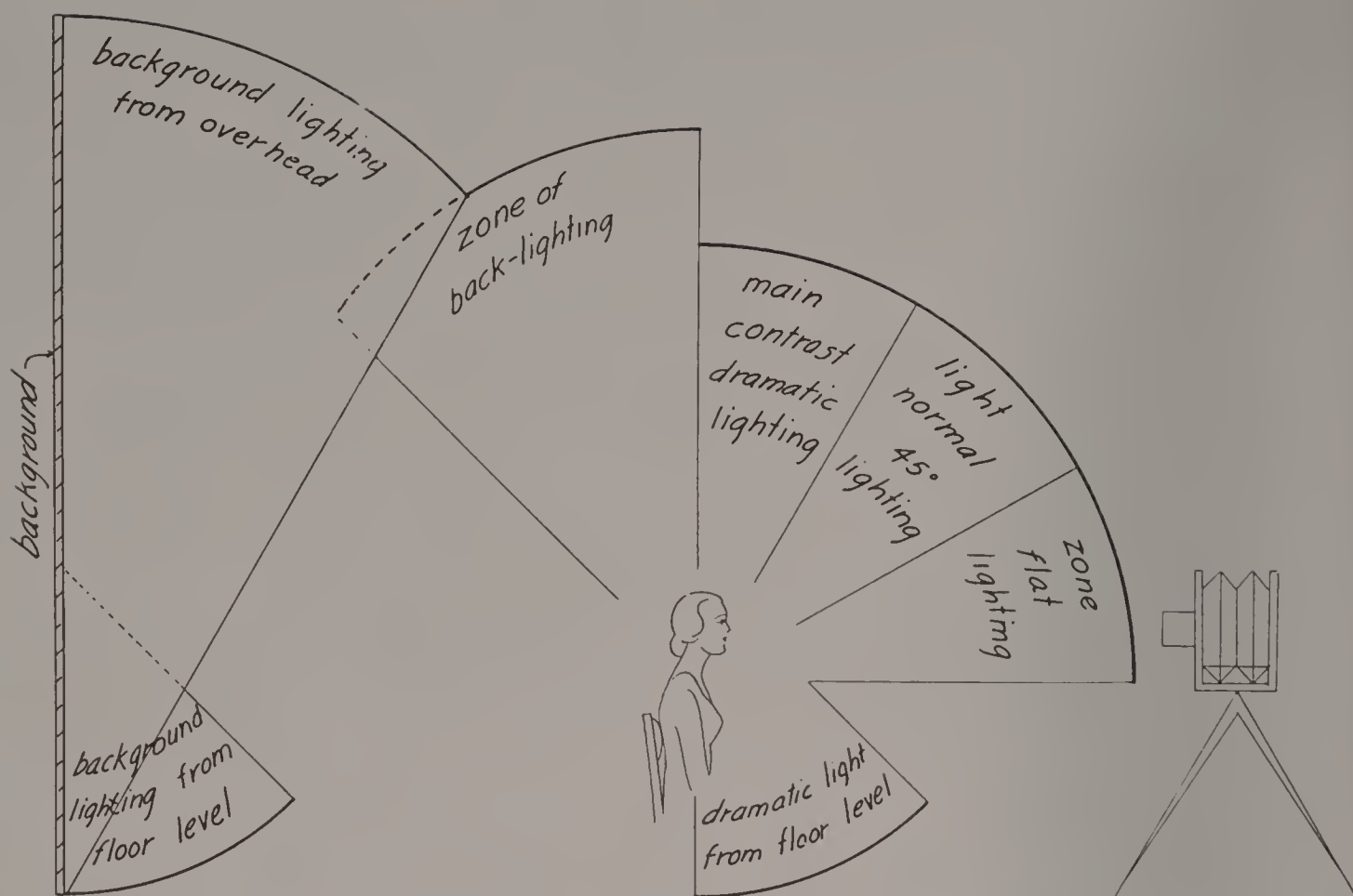


Figure 41

tendency is to use them too close to the subject. The larger spotlights are to be preferred because they have the necessary reserve power to work at a comfortable distance. All equipment of this kind throwing a concentrated beam of light must be kept far enough from the subject to avoid “burning up” (in the negative) the portion of the picture the accent light is projected upon.

### *Co-ordination of Lighting*

It has been shown that each unit has a definite function in the lighting of a portrait and how by adjustment of the height and position in the zones flat, normal or contrast effects are obtained. Each step in building up the lighting of a picture has been considered in about the same order in which the lights should be placed in position on a set. Each type of unit and its use has been treated separately to avoid confusion. A composite drawing (Figure 40) made by combining the floor plan for each lighting effect described in the preceding pages, shows graphically the relation between the zones. The height of the lighting units in the various zones is also

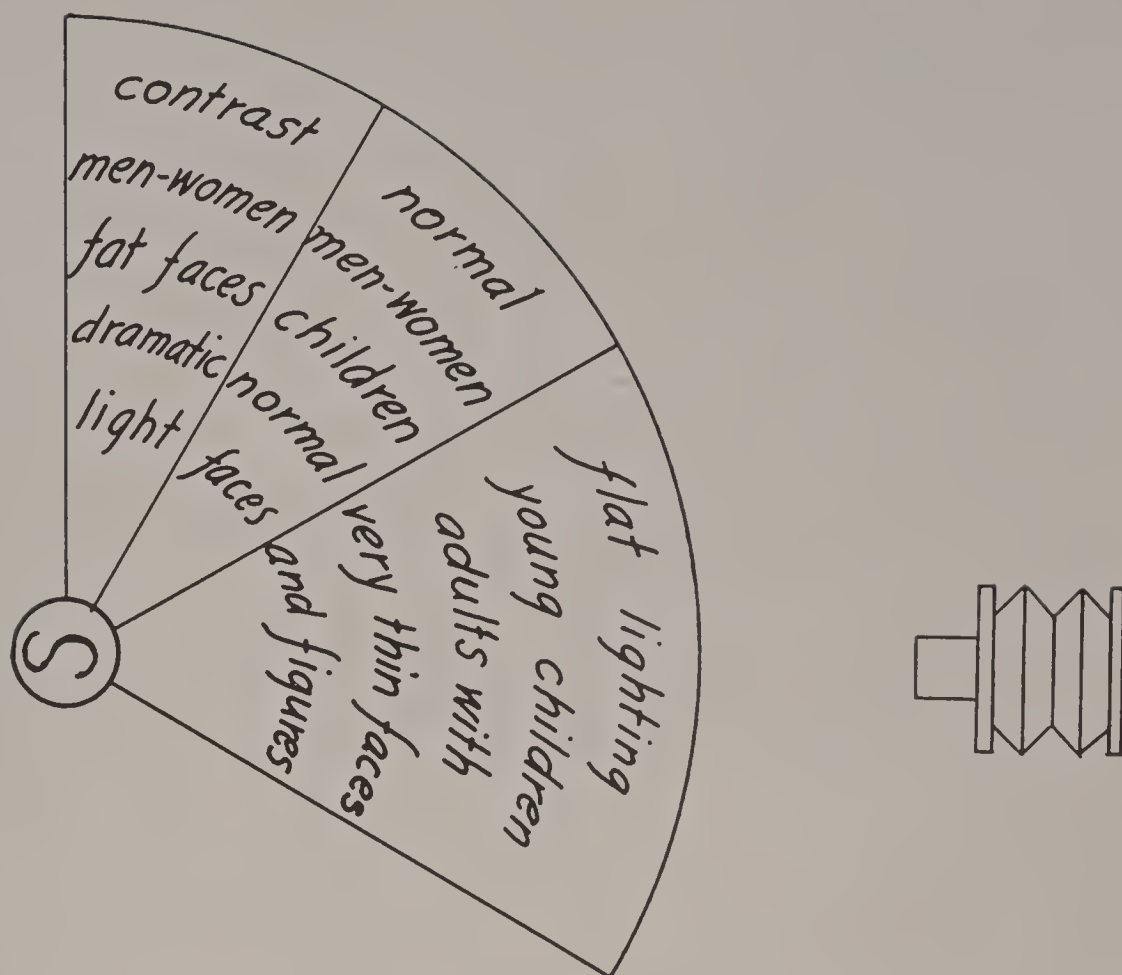


Figure 42 Zone Floor Plan for various subject types.

illustrated by a composite elevation sketch. (Figure 41.) The reader should not jump to hasty conclusions as a result of a cursory examination of the two composite charts. The average portrait requires the manipulation of lamps in only two or three zones. No portrait however elaborate will include lights in every zone. Secondary illumination will, of course, be used in the majority of pictures, 45° lighting frequently and likewise some form of background lighting. But back-lighting, dramatic and various kinds of contrast lightings are usually the primary light source in character portraits and as such are practically independent of secondary illumination. It should be the constant effort of the photographer to simplify his lighting methods and to have a logical reason for the location of each lamp. With a clear understanding of basic principles it is not difficult to decide what lighting to use on a subject.

### *Types of Subjects*

The principles involved in the selection of the lighting to be used

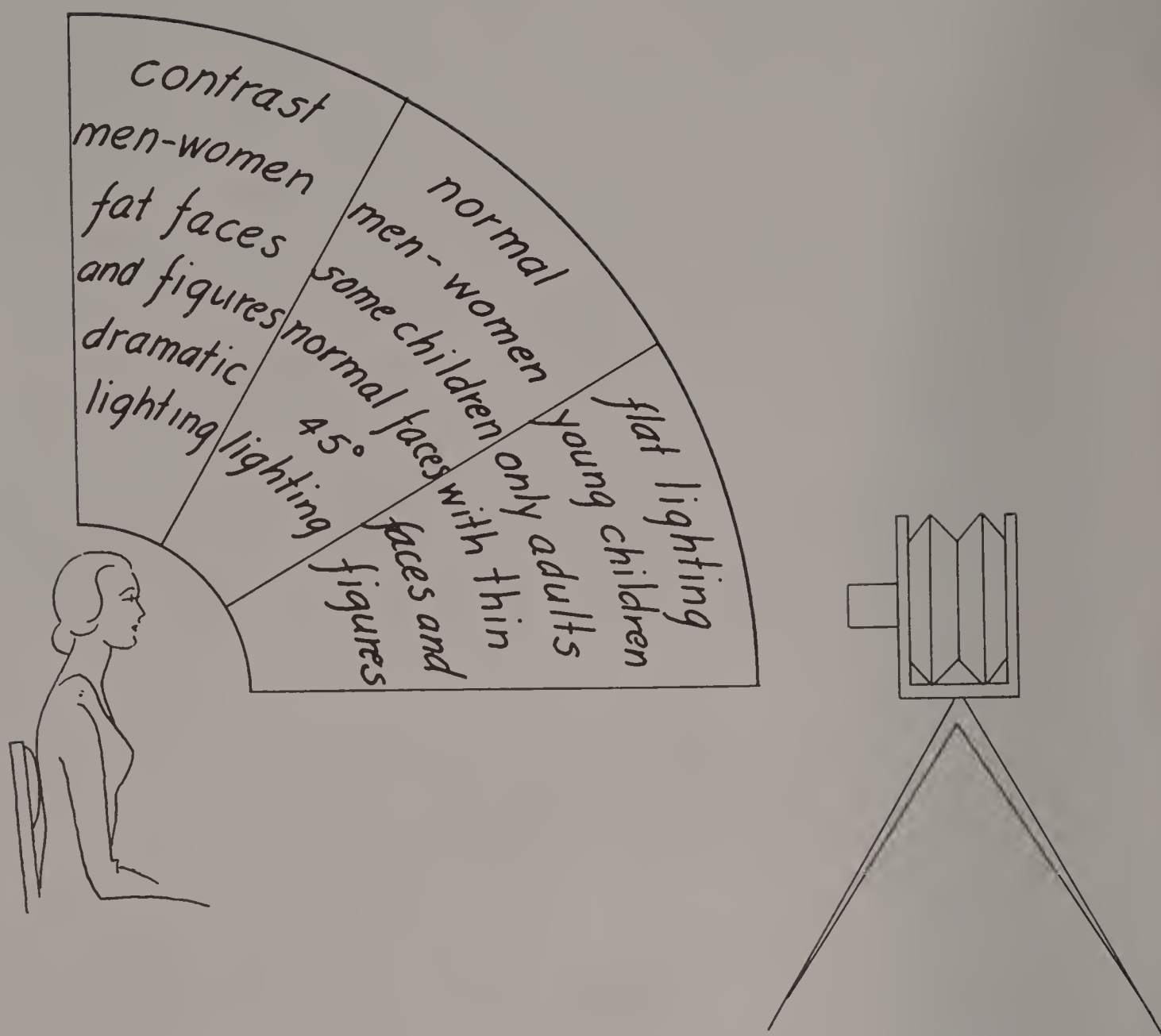


Figure 43 Elevation Zone Plan showing height of lamps for various subject types.

for various types of subjects are few and easily understood. In general all thin faces and bodies require full illumination from the main light source with the lamps close to the flat lighting region of the floor plan zone. The same principle also applies to the height of the lamps; they must be low enough to eliminate hollow cheeks and unpleasant shadows. The secondary illumination on the shadow side should also be moved closer to very thin subjects.

The full or "fat" face and figure must be lighted in exactly the opposite manner with the main light in the contrast zone and high enough to throw shadows under the cheek bones and chin. This rule, however, should not be applied too literally to children.



A floor plan chart (Figure 42) and an elevation chart (Figure 43) with zones sub-divided will serve to illustrate the principle of lighting thin or fat subject types. Pug noses, flop ears, Andy Gump chins and other human frailties are frequent problems of the portrait photographer. In most cases skillful posing is the remedy and a chapter is devoted to the subject.

In conclusion let me impress upon the readers, especially amateurs, that there are no secrets in lighting. The laws and attributes of light are the same at all times and everywhere—it remains only for the photographer to master the principles and apply them to his advantage. The beginner should not be intimidated by high-sounding definitions or led astray by a system which may and usually does turn out to be merely *one* phase of lighting.

# CHAPTER FOUR

## Exposure and Development

Every subject or scene has a scale of tones and in order to produce a faithful likeness of the subject or scene in a print the photographer must, by the process of correct exposure and development, furnish himself with a negative with a scale of tones similar to the tone scale of the subject photographed. A clear understanding of tone reproduction is a requisite if negative and print perfection is to be attained. The photographer must, by judgment based on experience, or by the use of an exposure meter, determine the tone scale of the subject so that the correct exposure and development can be used. In other words, films of known sensitivity, correctly exposed and developed will result in negatives with the correct scale of tones, provided the photographer has accurately analyzed the tone scale of the subject.

The tone scale of the negative is represented by the relative density of the silver deposit on the various portions of the negative. The density of the silver deposit is in direct proportion to the amount of light *reflected* from each part of the subject or scene to its respective portion of the negative. It has long been known that the problem of the photographer is to reproduce a continuous range of tones from shadows to highlights and that, in order to accomplish this, correct exposure is essential.

Early investigators established the fact that a given exposure

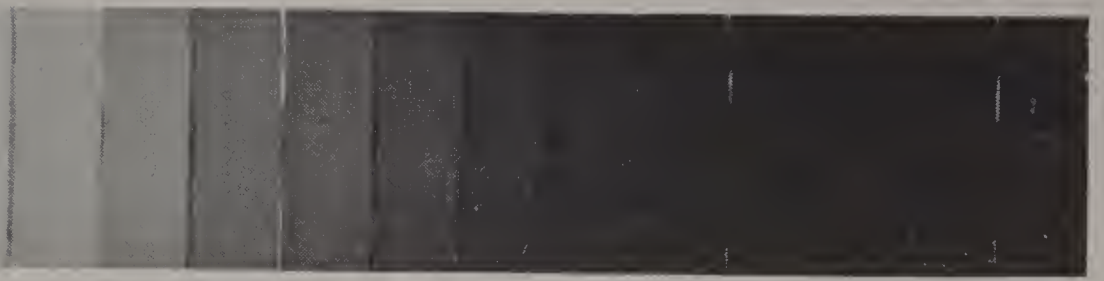


Figure 44

produced a uniform density or deposit of silver when the plate was developed under uniform conditions. It was also found that the density of the negative could be increased in ratio to the amount of increased exposure. In other words, the density of the negative and, therefore, its printing quality could be determined in advance.

One of the earliest methods of obtaining an accurate measurement of negative density was the "step wedge." (Figure 44.) Step wedges were first used by Hurter and Driffield, who were pioneers in the study of tone reproduction and every student of the early history of photography is familiar with their work.

Theoretically, a series of exposures increased in geometric ratio (1, 2, 4, 8, etc.) would result in a uniform increase in negative density for each successive increase in exposure. This law of constant density ratios must, however, be qualified with the explanation that each plate has a different scale of gradation, which is known as the "characteristic curve" of the plate.

The characteristic curves of plates produced by different manufacturers vary in shape. A typical curve (Figure 45) has a long straight center portion, a short curve at the top and a longer curve at the bottom. The curve at the bottom represents the under-exposure portion, the extended center portion the normal exposure and the curve at the top the over-exposure portion of the negative. It is, therefore, obvious that the density ratio of a series of geometric exposures can only be *uniform* in the middle, or *normal* portion of the characteristic curve of the negative. Each film or plate has its own characteristic curve, the exact nature of which is known to the manufacturer, who endeavors to maintain the qualities peculiar to a particular film in each successive batch of material produced.



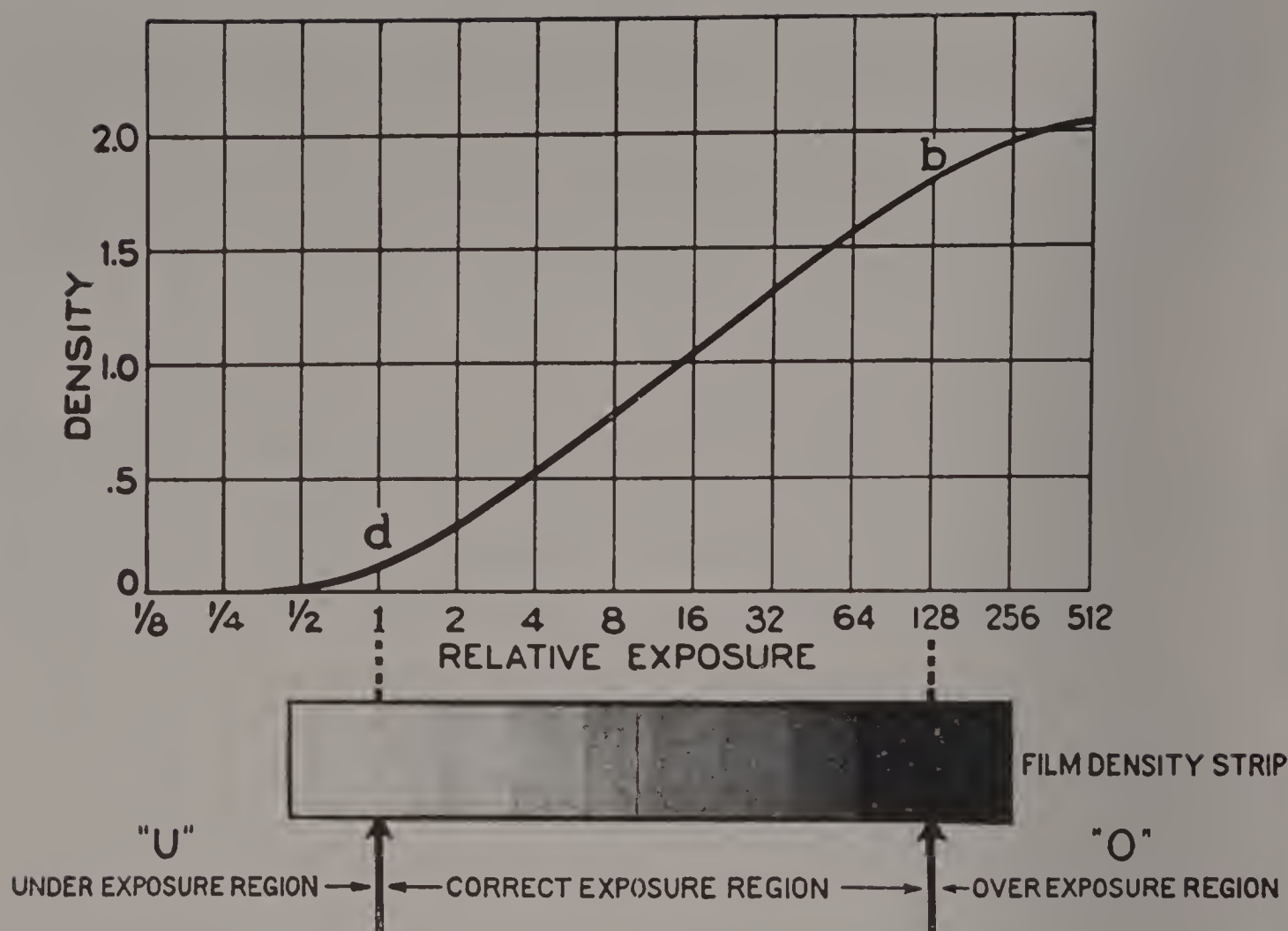


Figure 45. Typical characteristic curve.

Courtesy Weston Electrical Instrument Corp.

The prevailing tendency among the better photographers is to work in the under-exposure band and the lower straight line portion of the characteristic curve of the film, because negatives produced by this method have superior printing quality. Manufacturers, influenced by this practice and as a result of their own research, are producing films and plates with a long "foot" or under-exposure curve.

I have stated that the better photographers use the lower portion of the exposure curve or "foot" of the film. The reason for this is that photography is a black and white medium and the range of tones (shadow tones) in the under-exposure curve must be depended upon for the delineation of the form and texture of the subject matter



*Figure 46*

photographed. The painter has a decided advantage over photographers in this respect because of the nature of color and the sensitivity of the eye to light of various wave lengths. An artist with an accurate knowledge of the wave length of light and the different color sensations produced in the brain can often reproduce the subject matter with tone values which, reduced to monochrome, would be unsatisfactory for photographic purposes.\*

A fact which many portrait photographers apparently do not understand is that *studio lighting is nearly always short scale lighting* and negatives produced by artificial light are mostly short scale negatives.

A short scale negative is one which produces a print with a short range of half-tones from the deepest black to gray or from pure white to gray. Short scale negatives are obtained by utilizing that portion of the exposure curve of the plate which most nearly corresponds to the tone scale when a short scale subject is photographed. To illustrate this point I have selected two prints, *both* made from short scale negatives but with this *important* difference. Figure 46 is a "low key"\* subject and Figure 47 is a "high key"\*\* subject.

It will be noted that the brightest highlights on the girl's face in Figure 46 are gray and that there is a very short range of half-tones between the highlights and the deep black of the background. The negative from which this print was made has a scale of tones well within the under-exposure curve of the negative.

The "high key" portrait (Figure 47) has an equally short range of tones but on the opposite end of the exposure scale. The exposure was normal, but the lighting was intensified on the background in order to *over-expose* that portion of the negative. This means that the tone scale has a short range from normal into the over-exposure curve.

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\*For further information on the subject of the sensitivity of the eye and photographic materials to color and light, the reader should read "The Photography of Colored Objects," published by Eastman Kodak Company.

\*A "low key" subject is one in which the tones range from gray to black.

\*\*A "high key" subject has a range of tones from gray to white with no shadow tones darker than gray.





*Figure 47*

Both long and short scale negatives are produced in outdoor photography. Many negatives made by daylight, on overcast days, are as short in tone scales as studio negatives made with flat lighting. The majority of outdoor scenes, however, have a long scale of tones and in many instances the range of gradations from highlight to shadows is actually beyond the capacity of the plate.

### *Exposure of the Long Scale Subject*

When the photographer is working outdoors with an extremely long scale subject the first problem is to correctly analyze the tone scale. If there is reason to believe that the tone scale is beyond the capacity of the film, it will be necessary to decide whether the exposure will be made to preserve detail in the shadows or whether shadow detail will be deliberately sacrificed to preserve the highlights. In most outdoor portraits the photographer will elect to preserve the flesh tones and to obtain the most effective rendering of the costume, at the same time attempting to retain as much detail as possible in the shadows without over-exposing the highlights too much.

Exposure calculations in portrait photography are comparatively simple, because the subject or model is always the central point of interest and the exposure must be correct for the subject often at the expense of the background or surroundings. The old saying "expose for the shadows and let the highlights take care of themselves" was all right for the pioneer photographers, because the plates they used were so slow that under-exposure was a real problem. Exposure meters, capable of accurately measuring the *range of tones* from shadows to highlights were unknown and, therefore, it was good policy to play safe and expose for the shadows.

The modern photo-electric meters are unquestionably superior as a means of determining exposure. Manufacturers publish exhaustive instructions for the correct use of the instruments and those who have occasion to work under unfavorable light conditions will find it profitable to study the data supplied with the meter. Many photographers working in the studio day after day with the same lighting equipment, develop the ability to judge light values with remarkable

accuracy. I use a meter in the studio only for *unusual* lighting effects, but I invariably take the meter for outdoor photographs, where I *cannot control light conditions*.

Outdoor portraits are usually made under one or the other of two lighting conditions, with dull overcast skies or in brilliant sunlight.

Negatives made in the open but with an overcast sky or in the shade of a building will have a comparatively short scale of tones. My method of working under these conditions is to use the under-exposure curve so as to obtain strong shadows and the meter is used to check the shadows to avoid under-exposure of shadow detail.

Study of manuals for the use of exposure meters reveals the fact that most of the instructions refer to scenes having an extreme range of tones indicating the importance of this problem. These scenes are, of course, all or partly in brilliant sunlight, and if there are deep shadows also, the range of tones may be too long for the negative in which case it will be necessary to measure the light value of both highlights and shadows in order to decide what exposure will produce the most satisfactory negative.

For outdoor portraits where the contrast between highlights and shadows is extreme, I use a method which is comparatively simple. If observation indicates that over-exposure of the highlights and halation is likely, I measure the light value of the brightest highlights and set the "O" ("O" indicates the point beyond which all objects will be *over-exposed*) on the number indicated by the meter.\* Next, I measure the light value of the deepest shadow in which I wish to record detail. If the meter reading in the shadows does not fall below "U" (below which all objects will be under-exposed) when the dial is set for "O" on the brightest highlights, the final step is to determine whether or not the indicated exposure will result in a satisfactory reproduction of the flesh tones of the subject. If the indicated exposure for the flesh tones is materially different from the exposure indicated for the brightest highlights and deepest shadows, it will be necessary for the photographer to decide whether a more pleasing

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\*Weston Universal Exposure Meter, made by Weston Electrical Instrument Corp., Newark, N. J.



portrait will result from under-exposure or over-exposure of some portions of the scene.

When portraits are made in deep shade, shutter speeds are also to be considered. Shutter speeds of one-half second are about the maximum for adults and one-fifth second is very long for children. Under these circumstances it is sometimes advisable to save the flesh tones and detail in the highlights at the expense of the shadows.

Above all the photographer should constantly remember that negatives of good printing quality are the result of good lighting and correct exposure rather than of darkroom work.

### *Printing Papers*

Assuming that the subject-scene has been correctly analyzed and, further, that the negative has been correctly exposed and developed, we are now ready to consider the printing paper which will yield a perfect print.

Photographic papers have "characteristic curves" which correspond to the characteristic curve of negatives. A perfect print should result from the use of a printing paper having the same scale as the negative. A short scale negative requires a paper with a short tone scale, and a long scale negative requires a paper having a long tone scale.

Manufacturers designate the tone scale capacities of their printing papers in various ways, but the most common method of describing the gradation of a paper is by specifying its contrast qualities. The softer the paper the longer the scale of tones or degrees of contrast between the highlights and shadows. Therefore, a "soft" paper is the logical choice for a "long scale" negative. A hard or contrasty paper has a comparatively short scale of tones and should be used for short scale negatives.

Negatives having the best printing quality are obtained by using the long "foot" or under-exposure band of the characteristic curve of the negative. Even if only a small portion of the exposure curve be used a negative may, never-the-less, be perfect for the reproduction of a short scale subject.

It is an extremely important point that this rule does not hold true in connection with the exposure curves of printing papers. *A perfect print can only be obtained when all or nearly all of the tone scale of the paper is used in making the print.*

The reason for this is obvious. To obtain deep, velvety blacks we must utilize the deepest tones of which the paper is capable, and the whites must be clean and free from muddy effects, which are the unfailing result of not using the entire scale of the paper to the *pure white* of the paper stock.

The portrait photographer whose negatives are produced in the studio by artificial light should obtain negatives of uniform printing quality. Under such conditions one or two grades of paper (in two or three stock colors) should be ample. Making negatives for a particular paper is the most efficient way to produce fine prints. Some photographers waste an endless amount of time scurrying about to find a few sheets of some special kind of paper so that they can make a print from a negative which has been improperly exposed and developed and often doctored with various intensifiers or reducers.

### *Negative Development*

Before proceeding with the subject of development, let me explain that this is not intended as a general treatise on all phases of negative development. For our purpose it is sufficient to assume that negatives are tank developed at a standard temperature. There are many factors affecting development, including room temperature, variations in emulsions, agitation of film during development, freshness of the developer, and others that space will not permit us to discuss, but which have been treated elsewhere at great length by competent authorities.

Negatives with a short scale of tones in the normal and under-exposure curve of the film should be developed with the standard formulas of the manufacturer or in a developer which, by experience, the photographer knows will produce negatives of good printing quality. Using the under-exposure curve of the plate should not be interpreted to mean that the negatives are under-timed or that the

exposures are inadequate. A correctly exposed negative of a "low key" subject, with a tone scale entirely on the under-exposure curve may be "normal" insofar as development is concerned.

In the development of "high key" negatives proceed with caution especially where Panchromatic film is used. The reason for this warning is that "high key" negatives look so black when inspected by the transmitted light of the green Safelight that there is a great temptation to take them out of the developer before the process is completed. The charm of the "high key" portrait depends upon the delicate tone scale between pure white and the light grays. If the negative, assuming that it is correctly exposed, is under-developed, the white tones will be degraded and "dirty" in the print. In order to obtain clean, white tones in the final print it is necessary to use enough light to literally burn the background portion of the negative black with silver deposit.

Developing time should be increased 20 to 25% above normal and those of limited experience often misjudge the negative because the overexposed background portion becomes black and almost opaque during the first minutes of development. Test negatives, correctly exposed and developed for varying periods, are well-worth the time and expense of making and they should be kept in the darkroom as a standard for comparison after each batch of negatives has been developed.

### *Development of Long Scale Subjects*

The photographer who has occasion to make outdoor portraits will find that many scenes have a tone scale so long as to present a most difficult problem in exposure and development. An excellent example of this is a girl in a white dress, posed in the deep shadows of a large tree, with brilliant sunlight filtering through the tree and on the grass in the background. (Figure 48.) The extreme contrast of this scene is also partly due to the fact that it was late in the afternoon and the sun was low enough to produce a powerful back-lighting effect.

It is conceded that the problems of exposure and development presented by a scene of the type described above could be avoided





*Figure 48*



by the selection of a more favorable location for a portrait. But, in view of the fact that daylight cannot be controlled, it remains for the ambitious photographer to find ways to utilize the powerful contrast of sunlight to produce striking and unusual photographs.

Exposure is for the purpose of recording the image and preparing the film for development. Every experienced photographer knows that before exposed film is developed, there is *no* visible evidence of exposure. It is not until the negative has been in the developing solution for a short time that the image appears. A fundamental truth which, though elementary, should be clearly understood by the reader is that the portion of the negative which received the most exposure to light (the highlights) *always* appears first. The next portion of the image to appear is the half tones, the order of their appearance being in direct ratio to their exposure. Finally, shadow details which have received enough exposure to affect the emulsion appear.

The process of development causes a deposit of silver on the negative in proportion to the amount of exposure. By reducing the accelerator content of the developer the shadows and half-tones have an opportunity to build up before the highlights become hopelessly opaque.

To facilitate this method of development, I use a three solution developer.\* The normal quantity of solution A containing the developing agent (Pyro Soda or Pyro Metol) and solution B (Sodium Sulphite) are mixed with the usual amount of water in the tank. If, for example, the formula requires 8 ounces each of A, B, and C and water to make one gallon, all of the ingredients *except* C, Sodium Carbonate, (the accelerator) are added to the water in the tank.

Only 25% of the normal amount of solution C is added, and the films are developed (Panchromatic in total darkness) for ten to fifteen minutes with the low accelerator content. The remainder of solution C has, however, been measured out into three portions *before development starts* and each portion is added at intervals of five to ten minutes each. In order to facilitate the handling of the

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\*Eastman D1 or Eastman D7.



*Figure 49*

accelerator, a frame to hold three glass tubes has been prepared. (Figure 49.) This device can be manipulated in total darkness and only one precaution is required—when each successive batch of accelerator is poured into the tank, be sure to agitate the films to insure the thorough absorption of the contents. If negatives are not lifted out of the solution during development, the danger of fog is minimized. But when negatives are developed for prolonged periods, it is advisable to increase the Potassium Bromide. One dram of 10% solution of Potassium Bromide to the gallon of mixed developer should be ample. If the emulsion has not been acted upon by light, there will be no deposit of silver. No amount of development will rectify mistakes which result in under-exposure, because the process of development will not add detail where none existed as a result of exposure.

The longer the period of development, the greater will be the density of silver deposited, but the deposit will always be in proportion to the exposure of the different parts of the negative.

Highlights might be said to develop at high speed, half tones at an intermediate speed, and shadows at a low speed. It naturally follows that the longer the process of development continues, the



greater the distance between the highlights and shadows and, therefore, the longer the tone spacing in the half tones between.

Our principal problem in long scale negative development is to prevent the highlights which develop at a high rate of speed from arriving at the destination (complete development) before the shadow development which progresses at a comparatively low rate of speed has been completed. One method of accomplishing this is to reduce the accelerator ingredient of the developer and to increase the developing time to compensate for this change in the formula.

Developer formulae contain four principal ingredients—the developing agent, preservative, an accelerator, and a chemical to prevent fog, usually Potassium Bromide. When the accelerator is mixed with the developing agent, and films placed in the developer, it immediately becomes active, and the deposit of silver starts to take place after the elapse of a few seconds. All developer formulas specify a quantity of each ingredient for normal development, but the normal amount of accelerator causes the development of the highlights to proceed too rapidly for the extremely long scale subject.

This method of development can be used with any developer in which the accelerator ingredient is added as a separate unit at the time of development. There are many good developers, and it is not my intention to suggest that the formula I use should be adopted by other photographers.

I have described this process in every detail at the risk of making it appear involved and cumbersome. Actually, it is very simple, and once the technique is understood, the photographer can go about his business except for an occasional agitation of the films. The reader can judge the results for himself by studying carefully the print (Figure 48) which was made from a negative developed by the reduced carbonate method.

## CHAPTER FIVE

### Preparation For a Portrait

Advertising and illustrative photography has made enormous progress in recent years, due to the intelligent use, by commercial men, of facilities that are available to every photographer. That portrait photographers have not made comparable progress is, I believe, obvious even to the casual observer.

Modern illustrative photographers know that preparation for a picture is just as important as the actual exposure of the film. Sets are often built from artists' drawings, every detail to scale. The *composition* of the finished picture has been determined in advance. Costumes are decided upon, models are engaged, and every person having a part in the making of the photograph understands what he or she is expected to do.

The portrait photographer may argue that the commercial photographer can do all of these things because some rich advertiser is standing by, check book in hand.

The kind of preparation advocated for the portrait photographer does not require an investment of money at all, but merely a willingness to apply some of the methods that others have used with success. The only concession I ask of the reader, at the moment, is to grant that there is a difference between a "picture" and a "portrait" as defined in the opening chapter of this book.

The first step in preparation for a *portrait* is the preliminary interview with the subject.

Most interviews of this kind will be with women because they have more photographs made than men; and, of course, they always handle such matters for the children in the family. If young children are to be photographed, it is not necessary, or even desirable, to have them present at the preliminary interview for reasons which will be explained in the chapter on "Portraits of Children." Advance interviews with men are not easily arranged and in most cases are limited to a discussion of the time, the place, and the price.

The first question a woman asks is, "What shall I wear?" It is not to be expected that she will go out and buy wearing apparel for the occasion. Most women like to discuss costumes and they usually describe the contents of their wardrobes so that the photographer can suggest the most suitable garments. Various styles, fabrics and colors of garments for portraiture will be discussed more fully in the chapter on "Portraits of Women."

The discussion of questions that are uppermost in her mind insures a successful preliminary interview. But there is a psychological aspect that is just as important to both subject and photographer as all the talk about such routine matters as costume, make-up, and other plans for the portrait. Properly managed, the interview will convince the subject that a real portrait is being planned. The photographer will create confidence in his ability and when the portraits are made he will have the cooperation of an interested subject. The importance of this cannot be overestimated. Whether a portrait is made for art or for money, it can only be successful to the extent that the photographer has the cooperation of the subject.

There is no reason, that I have been able to discover, why a photographic portrait should not be as successful in its own field as a portrait executed by a competent portrait painter. The qualities that distinguished the works of great masters of portrait painting, particularly Holbein, were the minute delineation of form and a psychological presentation of the character of the subject. Surely the camera in the hands of one who has a true conception of its pos-



sibilities can equal, and often surpass, the portraits by moderns of the impressionist school, engrossed as they are in the superficial representation of form, novel arrangement, and color effects.

But mere representation of the physical object of the picture is not sufficient; if it were, the world would be full of portrait artists. A true portrait must have a psychological quality which can be recognized as belonging solely to a particular person. We cannot photograph a man's soul, his temperament, or his character, but only their outward manifestations. In youth, the features begin to take the form that they bear through life, but the emotions, moulded by environment, have not fixed the sensitive facial expressions or the lines by which we judge character. That is the reason that people past middle age are to be preferred as models for character studies.

The keen observer will find many character lines that have been so deeply etched by time and circumstance that even the retoucher's pencil cannot conceal them. That these tell-tale marks may reveal, for example, greed and hypocrisy, quite as unmistakably as other lines indicate nobility of character, is inevitable.

I am convinced that a moralist can no more be a great portrait artist than he can lift himself by his boot straps. He is committed, at all times and everywhere, to a policy of judging his fellows by his own standards. His kind is prominently identified with all attempts to regulate, by force if necessary, the lives of men and to prescribe what they shall drink and wear. I do not argue that it is necessary to be a libertine or to practice the excesses sometimes attributed to artists. But the portrait artist or photographer must be entirely free from moral prejudice and have an attitude of tolerance and liberality toward his fellow men.

The question as to what traits of character should be emphasized and what should be subdued in a portrait must be determined by the photographer, and every subject presents a different problem. The success of a portrait as a work of creative art, or as a salable picture, depends upon the correct solution of this problem.

If, for example, a woman has a particularly sensuous face, it is usually indicative of her character; and she will probably prefer a

voluptuous portrait. As a matter of fact, this type of woman, of whom fortunately there are a minority, simply hasn't the intellectual capacity to appreciate or even understand anything but a sensuous picture. The psychological qualities of some portraits should be obvious, while others should be extremely subtle.

A good illustration of this point would be found in many photographs or magazine advertisements in which the wealth and power of a successful man is indicated by the background and furnishings used in the picture. This is what I mean by establishing the psychological quality of a picture in an obvious manner. Steichen created a similar impression in a subtle manner in his portraits of famous men which frequently appeared in "Vanity Fair." He created his effects largely by the dignity and power of the lighting used in his portraits.

The photographer who makes only large head pictures deprives himself of the great psychological possibilities of the figure and costume.

I refer to costume in the sense of everyday wearing apparel and not theatrical costume.

One of the purposes of the preliminary interview is to eliminate any prejudice the subject may have against posing in a particular kind of costume, such as evening clothes, for example. A few discreet questions will reveal the extent and quality of the subject's wardrobe, and she should be instructed carefully in regard to what garments she is to bring when the portraits are made. Unless there is a definite understanding, or if the matter is left to her judgment, she is sure to leave the very costume most desired at home.

If Panchromatic make-up is decided upon, she need not apply any make-up before leaving home; in fact, a face freshly washed with soap and water is preferred. Warn the subject against having anything done with the hair on the day the photographs are to be made. The hair should not be washed within the two days prior to the appointment. Two possible disasters can be avoided by having an understanding about the hair. One is that the subject will go to her

regular hairdresser and request a special coiffure for a photograph and the other is that she will go to an entirely new hairdresser and ask for the same thing. This simple request seems to arouse some strange instinct in hairdressers, for the results are nearly always deplorable. Among all the things that should not be done, a new or unusual style of hairdress heads the list.

### *The Importance of Unlimited Time*

There is one thing in connection with every appointment that I insist upon having definitely understood, and that is that plenty of time must be allowed for the sitting. I will not make an appointment with a subject who has conflicting appointments or who attempts to impose a time limit. People are never charitable enough to admit their portraits are not satisfactory because they failed to allow the photographer sufficient time. It is my experience that portraits are successful in proportion to the control the photographer exercises over the factors that enter into making the picture.

If the subject is allowed to “run the show” the photographer has only himself to blame for the inevitable failure of the portrait.



## CHAPTER SIX

### Make-Up

The motion picture industry is to be thanked for perfecting the art of photographic make-up. The methods described in this book apply to "Panchromatic Make-up" because cosmetics prepared for use with Panchromatic film are used. Make-up serves two separate and distinct purposes; to create character effects and to cover freckles, blemishes and skin defects. In portrait photography we are interested in character make-up only to the extent that theatrical methods may be applied to the correction of structural and other faults in the subject's features. Theatrical and motion picture make-up is frequently used for the express purpose of *changing* the character and appearance of the subject but in portrait photography this is the very thing we wish to avoid. All structural corrective measures must be co-ordinated in the step by step application of the cosmetics so as to harmonize with the skin defect covering qualities of the make-up.

The principal advantage of make-up is that when it is properly used retouching is reduced to a minimum. The development of the art of photographic make-up can, as a matter of fact, be traced directly to the fact that motion picture film cannot be retouched because the negatives are too small. The make-up artist is one of the most important technicians in the motion picture studio because the slightest imperfection in make-up is exaggerated when the film is projected. The reader can get a good idea of the enormous enlarge-

ment of motion picture negatives from the following example. A single negative of motion picture film is called a "frame" and it has a picture aperture of 0.825"x0.600".\* The projection of this negative on a screen 20.3'x14.8' in size represents a *magnification of 295 diameters*.\*\* This almost unbelievable enlargement of motion picture film is convincing evidence of the skill employed in the application of make-up. Although portrait negatives are never enlarged as much as motion picture film, the same care must be devoted to make-up because details which escape the eye due to the almost constant motion of the screen image are easily discernible in the photographic print.

### *Selection of Subjects for Make-up*

It is not the province of the portrait photographer to *create* character but to *record* that which already exists. Make-up is not magic and the mere use of it does not insure a successful portrait. It should be regarded as *one* of the aids in the making of a portrait, to be used for selected portrait subjects when there is definite need for it.

Make-up should be used with discretion, if at all, on very young girls and women past middle age. A modified make-up for young girls will be described later. Many women, faced with the problem of fading beauty, are anxious to be "glorified" but too often this only results in making her the laughing stock of her friends, and exposes the photographer to ridicule. Make-up does *not* remove or cover deep wrinkles and it is absolutely useless to attempt it.

Panchromatic make-up is used for motion picture photography by both men and women, the method of application being basically the same. Except for professional purposes I cannot recommend it for men. The average man would not submit to the application of powder and lip rouge without first being securely bound and gagged.

### *Qualities of Light*

Before the introduction of panchromatic film a sign was often displayed in photographers' dressing rooms with the admonition, "do not use lip-stick or rouge." The reason for this warning was that the

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\*Bausch & Lomb Optical Co.

\*\*The focal length of projection lenses and the area of screens vary accordingly to the size of the theater in which they are to be used. The example given shows the size of screen image when a projection lens of 5.25" focal length is used at 130 feet from the screen.



*Figure 50. Color blind film  
and daylight.*



*Figure 51. Color blind film  
and Mercury Vapour light.*

color blind film then in use lacked sensitivity to red and as a result lip-stick photographed almost black. (Figure 50.) Red objects were badly *underexposed* in the negative and as a result went black in the print. Cheeks looked hollow when rouge was used with color-blind film and daylight illumination.

Those who have an opportunity should examine the skin of the average person under the light from a Mercury Vapour lamp. The ultra-violet light reveals a veritable network of veins and tiny blood vessels under the skin. These and the freckles and blemishes on the surface of the skin when photographed with color blind film are actually exaggerated because they print almost black. (Figure 51.) The desire of photographers to have freckles and other defects removed from negatives probably started the weird excesses since practiced by retouchers.

Light that is very strong in *blue* (Mecury-Vapour) tends to emphasize skin defects and light that is strong in red (Mazda lamps) minimizes them. Daylight contains both blue and red rays but Mazda





*Figure 52. Color blind film and daylight.*



*Figure 53. Panchromatic film and daylight.*

lamps are superior in quality for portrait lighting. Daylight contains too much blue for certain subjects even with Panchromatic film. This is especially noticeable with fair complexions and heavy freckles. An interesting comparison between the results obtained with color-blind film and Panchromatic film with daylight from a skylight is shown in Figures 52-53. It is frequently necessary to use a yellow filter\* to absorb the excessive blue rays.

Another way to analyze the difference between daylight and Mazda light is to think of daylight as “white” light because of the preponderance of blue and Mazda light as “yellow” light because of the dominance of red. The yellow filter mentioned above absorbs blue rays and permits red rays to pass so that the light after passing through the filter becomes yellow. In other words Mazda lamps provide approximately the same color correction as a yellow filter, and with Panchromatic film the skin defects that require retouching are reduced to a minimum. (Figure 54.)

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\*Wratten Filter K1 or K2.



*Figure 54. Panchromatic film, no make-up.*



*Figure 55. Panchromatic film, with make-up.*

When sound was introduced in motion pictures Panchromatic film was already in general use. One of the first problems encountered was that the microphones picked up the “hum” and other noises from “arc” lights so the entire industry turned at once to Mazda lamps. Panchromatic make-up as it is used today has been perfected for use with Mazda lamps and under these conditions the most satisfactory results are obtained. (Figure 55.)

### *Equipment for Make-up*

The make-up room should have a dressing table equipped with a good mirror and special illumination. It may be built into the wall of the dressing room or it may be a detached piece of furniture. The lights of an ordinary room are entirely unsatisfactory because they seldom provide equal illumination of both sides of the face which is necessary if the make-up is to be properly applied.

The dressing table (Figure 56) in my studio is similar in design to those used in Hollywood make-up rooms and it is a built-in feature



*Figure 56*

of the dressing room. It has a vertical row of 25 Watt lamps on each side and a row across the top, all behind ground glass. The table is 36 inches wide and the top row of lamps is 36 inches above the surface of the table. When the subject is seated directly in front of the table there are no cast shadows on the face to interfere with the application of the cosmetics.

The table shown in Figure 56 was built in my workshop to fit the available space in the dressing room. Anyone skilled in the use of carpenter tools can build a similar piece of furniture. I would suggest that the vertical rows of lamps be kept at least 30 inches apart, otherwise the dimensions of the table can be varied as much as desired.

A rubberized apron should be provided for the subject to wear during the application of make-up to protect the clothing. A head band should also be used to keep powder out of the hair. The following items are required for applying cosmetics



Brushes for Lining colors  
Dermatograph pencil (for eyebrows)  
Powder puff  
Face powder brush

Professional make-up catalogs list a complete range of colors in grease paints, lining colors, rouge and powders for Screen and Stage but only a few colors (Panchromatic) are necessary for the portrait studio. The various colors are numbered and all materials should be ordered by number.

The following cosmetics are required for the complete make-up:

### *Grease Paint*

This is the foundation of all make-up and the base for lining colors, rouge and powder. The Panchromatic scale of grease paint colors ranges from light tan to deep brown. The makers will, upon request, recommend the color by number for blondes, brunettes and other subject types.

### *Lining Colors*

The portrait photographer will use Lining colors principally for eye shadow and to accentuate some features and subdue others. They are used for character make-up and to make highlights, shadows, wrinkles and other special effects for screen and stage.

### *Moist Rouge*

Packed in paste form and applied with a Lining Brush, Moist Rouge is used instead of Lipstick. The use of Moist Rouge applied with a brush is recommended.

### *Liquid Make-up*

Made in the same colors as grease paint, Liquid Make-up is used on the neck and shoulders to blend with the face tones.

### *Powder*

Colors to match the various numbers of grease paint and liquid make-up must be used.

### *Mascara*

The final touch in make-up. Artificial eyelashes are extensively

used in motion picture photography, but they are not recommended for the average portrait subject.

*Cold Cream (to remove make-up)*

It is my suggestion that those who are interested write to reputable manufacturers of make-up materials for information in regard to the proper colors and methods of application. The reader is warned that the information given here in regard to numbers of various items may become obsolete due to possible changes in cosmetics. At the time this book goes to press, Max Factor\* recommends the following items, by number, for various subject types.

YOUNG WOMEN

	<i>Blonde</i>	<i>Brunette</i>
Panchro. Foundation	27	26
“ Face Powder	27	26
“ Liner Color	21	22
“ Masque	Brown	Brown
“ Eyebrow Pencil	Brown	Brown
“ Moist Rouge	390A-Medium	390A-Medium

MEN

	<i>Blonde</i>	<i>Brunette</i>
Panchro. Foundation	28	29
“ Face Powder	28	29
“ Liner Color	22	22
“ Masque	Brown	Brown
“ Eyebrow Pencil	Brown	Brown
“ Moist Rouge	7	7

ELDERLY TYPES

	<i>Women</i>	<i>Men</i>
Panchro. Foundation	25	26
“ Face Powder	25	26
“ Liner Color	21	21
“ Masque	Brown	Brown
“ Eyebrow Pencil	Brown	Brown
“ Moist Rouge	8	7

CHILDREN

	<i>Female</i>	<i>Male</i>
Panchro. Foundation	22	24
“ Face Powder	22	24
“ Liner Color	21	21
“ Masque	Brown	Brown
“ Eyebrow Pencil	Brown	Brown
“ Moist Rouge	390A-Light	7

For extreme types the numbers may vary to suit the conditions.

\*Max Factor & Co., Hollywood, Calif.

Elizabeth Arden\* has a complete line of screen and stage make-up and her cosmetics have been used in numerous motion picture productions. The foundation colors are numbered from 1 to 10, and powders, (including liquid powders) are obtainable in corresponding numbers to match the foundation colors.

I prefer Foundation No. 6 for blondes and No. 5 for brunettes. Some make-up artists use No. 5 for blondes and No. 6 for brunettes. For best results, however, the make-up room should contain a complete range of foundation numbers, the lighter ones for high lighting and the darker ones for blending and corrective work. The powder should correspond to the main foundation but one number lighter in color should be used for thin faces and one number darker is recommended for fat faces. Two lipstick colors are required—No. 21 “Studio Light” and No. 22 “Studio Medium.” Eye shadow should be applied with Screen Liners No. 1 Light Brown and No. 2 Dark Brown. Black Mascara and black eyebrow pencils should be provided, but brown will be used most frequently.

### *Application of the Make-up*

The face must be scrupulously clean before the make-up is applied. Soap and water should be used for the purpose. Cold cream will remove street make-up quickly and effectively, but unless the process is closely supervised, cleansing the face may develop into a problem of how to get rid of the cold cream. If cold cream is used every trace of it must be removed.

The subject should remove her dress, particularly if it has a high neck line, so that it will not become soiled by cosmetics. A kimono or robe should be provided for the subject to wear while the make-up is being applied. The rubberized apron should be worn over the robe. Most garments made for the purpose have snap fasteners so that they fit rather closely around the subject's neck. If a head band is not available a towel can be bound around the subject's head. Thus attired, with street make-up removed, the subject is ready for the first step in the application of cosmetics. (Figure 57.) Each step in the

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\*Elizabeth Arden, Screen Stage Make-up Laboratories, Hollywood, Calif.





Figure 57. *Without Make-up.*



Figure 58. *Application of Grease Paint.*

make-up process should be performed in exactly the same order in which it is described here.

### *Applying the Foundation—Grease Paint\**

From a tube of grease paint of the proper color, squeeze about one-half inch into the palm of one hand. With a circular motion of the fingers of the other hand distribute the grease paint evenly over the palm of the hand like an artist spreads pigments on a palette with a palette knife. Spreading grease paint thinly over the palm of the hand aids in smooth, even application, when it is transferred to the subject's face.

*Grease paint positively must be used sparingly or the entire make-up will be a failure.*

With the tips of the fingers deposit small dots of grease paint all over the subject's face until it acquires a freckled appearance. (Figure 58.) Make sure that these little dabs of grease paint extend

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\*Grease paints formerly required constant dipping of the finger tips in cold water to smooth out. Some grease paints were used after an application of cold cream. With improved cosmetics these methods are unnecessary.

under the chin to the base of the neck, also in the ears and behind the ears.

With grease paint distributed over the face the process of smoothing it out can begin. Some experts favor starting at the point of the chin and working upward while others recommend working from the center of the face outward. I have found it expedient to follow the contours of the face from the nose and chin, blending the grease paint thinly and evenly with an outward stroke of the finger tips. Do not overlook the corners of the mouth or the region about the nostrils and be sure to work the grease paint far enough into the edge of the hair to cover the exposed portion of the scalp. Cover the back of the neck down to the shoulders. (Figure 59.)

Thus far the make-up procedure is identical for all subjects except that the *color* of the grease paint foundation is selected according to the subject type.

### *Eye Shadow*

Shadow should be used on the eye lids, never under the eyes. If the lighting is correct, there will be a natural shadow under the eyes in nearly every pose; in fact a little retouching may be necessary to soften the natural shadow.

A point to be remembered is that eye shadow, like the grease paint foundation, is to be covered with powder and it should be a little darker than the tone desired when the make-up is complete. In other words, Panchromatic powder and grease paint is always lighter than the eye shadow and lip rouge so allowance must be made for a loss of contrast when the powder is applied.

Lining colors for the eye shadow are designated by number for use with certain subject types and particular grease paint colors.

Start the eye shadow by placing a tiny spot of the proper lining color just above the eyelashes. Patting carefully with the finger tips is more effective than rubbing because there is less disturbance to the grease paint base. The shadow should be blended upward towards the eyebrows and outward towards the side of the face. (Figure 60.) Some make-up artists use brushes starting with a thin line of color





*Figure 59. Grease paint smoothed out.*



*Figure 60. Eye shadow and lipstick applied.*

just above the eyelashes and working up and outward. The majority, however, use the finger tips and I believe that to be the better method.

The darkest shadow should be just above the eyelashes and the color should be so carefully blended upward and outward that it simply disappears with no visible line at the edges.

The obvious question of course is how *far* upward and outward should the eye shadow be extended. The motion picture make-up man can take liberties in order to create a desired character effect. But the portrait photographer, like the sculptor and the painter, must make *form* the prime consideration. The orbit or cavity of the skull in which the eye is located is a natural frame for the “windows of the soul.” The eye shadow should not be extended beyond the orbits for portrait purposes.

If the eyes are large, the shadow can be extended to the edges of the orbits because this will accentuate them. If the eyes are small, the generous use of shadow makes them appear smaller than they actually are. It is like placing a small picture in a large frame; the





Figure 62



Figure 61

picture looks smaller in *proportion* to the space around it.

Subjects with deep set eyes require very little eye shadow. If the eyes are close together (Figure 61) the shadow should not be extended to the inside corners.

If the subject's eyes are set wide apart (Figure 62) the process should be reversed and the shadow applied rather heavily in the corners of the eyes next to the nose.

The final steps in the eye make-up will be described in the order in which they are to be performed in the make-up process.

### *The Mouth*

Moist rouge is next applied to the lips with a small lining brush. (Figure 63.) It is important that the inside of the lips be covered with rouge so that if an opportunity occurs to make a smiling portrait, the difference between the natural color and the cosmetic will not show.

Lipstick is one of the few cosmetics that nearly all women use, and the idea of having the subject apply the lip make-up may occur



*Figure 63*

*Powder, mascara and eyebrow pencil applied.*

to the reader. Unquestionably, moist rouge applied with a brush is superior to lipstick; and few women outside of the theatrical profession are skilled in the use of brushes. Another objection to the subject taking an active part in the make-up process is that she will either proceed according to her daily habits or attempt to execute some fantastic character make-up she has seen in a movie magazine. Left to her own devices, the average woman does rather a bad job of improving on nature.

Most women manifest special interest in the lip make-up, no doubt, because they have made a critical study of their mouths in the mirror for many years. Unless a portrait is intended purely for artistic purposes, it is a mistake to make any major changes in the lip make-up. The subject should be satisfied with every detail as the make-up proceeds, because attempts to correct any part of the oily base after the powder has been applied will result in a mess that will be extremely difficult to clean up. Deviation from the daily make-up

style of the mouth should be accompanied by a clear explanation of the reasons for it.

A common practice among women is to use lipstick on the center of the lips and neglect the corners of the mouth. This is due, in part, to carelessness and to lack of knowledge of correct make-up.

The shape of the subject's face should be considered in connection with the make-up of the mouth. The vertical planes of the face that is too long\* should be broken by horizontal lines. The lip rouge should be extended well into the corners of the mouth to provide the necessary horizontal plane. (Figure 64.)

Long, oval faces can be shortened by apparent horizontals. Round faces can be given the desired oval by vertical accents. If the subject has a round face and a rather large mouth, thin out the lips towards the corners in order to shorten the mouth as much as possible. (Figure 65.)

If the subject has a normal or round face, a rather full arch or curve can be used on the upper lips. Avoid a pronounced "cupid's bow" in combination with a long face because it accentuates the vertical planes.

In cases where the mouth is decidedly bad, corrective measures should start with a careful application of grease paint to cover the natural outline of the lips. As far as the camera is concerned, the lip rouge must represent the form of the mouth. If the natural lip line shows through the make-up, the attempt has failed. The lighting must be watched because a cast shadow from strong cross lighting may reveal the actual line of the lips.

### *Other Corrective Measures*

We have completed the description of all the steps in the application of the straight make-up to the point where we are ready to apply the powder. Thus far we have been working with foundation cosmetics having an oily base and a semi-liquid or paste consistency. Therefore, if any effort is to be made to reduce certain features and accentuate others by the use of Lining colors, it must be done at this time so that the Liners can be blended with the grease paint base.

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\*The correct proportions of the face will be discussed in the chapter on "Posing."





*Figure 64*



*Figure 65*

The processes I have described require sufficient time to give the make-up man a good opportunity to study the subject's features and to decide what corrective measures, if any, are to be used to complete the make-up.

Lining colors are the medium through which the various corrective effects are achieved. The fundamental principle of light and shade is the basis—light comes forward and darkness recedes. To accentuate a part of the face, light colors are used and to reduce a prominent feature Lining colors darker than the surrounding make-up tone are applied.

A receding chin, for example, is built up by high-lighting the entire area of the chin with a much lighter shade of color than the grease paint base of the make-up. There is, in my opinion, very little need of high-lighting in the portrait studio because with careful manipulation of lamps the desired results can be obtained by lighting. In motion pictures, high-lighting is done with make-up because the subject is almost constantly in motion and it is impossible to high-light such features as the chin at all times with lamps.

A protruding chin presents a problem in reduction. Lining color several shades darker than the grease paint base should be used and



*Figure 66*

the edges must be carefully blended into the ground tone. Protruding chins are either pointed or rounded. On a round protruding chin apply shadow to the center and spread it over the entire area; if the chin is pointed, apply most of the shadow on the tip of the point.

The same method should be used for too prominent cheek or jaw bones.

An example of the use of both high-light and shadow is shown in Figure 66. The problem is to make a flat nose thinner and more prominent.

The bridge of the nose has been high-lighted with a much lighter shade than the ground color, and the sides have been blended with a much darker shade.

### *Powder*

The powder should match the grease paint foundation. Sometimes a lighter powder is used for very thin faces and a darker shade for round faces.

A patting motion of the powder puff is used to apply the powder, and this should be continued until the grease paint will absorb no more. The corners of the eyes, mouth, and around the nose are difficult to reach with the powder puff, so they should be checked carefully to make sure they are thoroughly covered with powder. Cover every part of the grease paint foundation from the hair line to the base of the neck, around the ears and back of the neck. Make sure that the eye shadow and lip rouge are profusely powdered and



*Figure 67. An unretouched photograph of the completed make-up.*



if there are wrinkles around the eyes pat over them again drawing the wrinkles apart with the tips of the fingers.

### *Removing Surplus Powder*

With a soft complexion brush, preferably one made of camel's hair, remove all surplus powder. This should be done with a very light stroke of the brush. The make-up should now be perfectly dry and velvety smooth in appearance. (Figure 67.)

After the surplus powder has been removed from the lips, the subject should moisten them slightly with the tongue.

### *The Eyebrows*

The portrait photographer will find it necessary with the majority of subjects to pencil the eyebrows on the natural eyebrow lines. If the eyebrows have been plucked, there is no choice.

The advisability of plucking eyebrows or having it done for a portrait is, in my opinion, questionable. If the subject has heavy eyebrows, they can be penciled correctly and the excessive hair above and below the penciled line removed by retouching. This cannot be done successfully with small negatives.

The shape of the face and the size of the eyes are deciding factors in correct eyebrow penciling. The face that is too long needs to have the vertical planes interrupted to shorten the face and eyebrows should be long with a rather flat curve. Avoid a sharp upward curve or arch of the eyebrows for long oval faces. The round face should not have the eyebrows extended too far at the outer end. Subjects with round faces often have eyes set rather far apart, and the eyebrows should be penciled from a point directly over the inner corner of the eye. If the eyes are too close together, start with the eyebrow line away from the corner of the eyes to increase the *apparent* width between the eyes.

In the normal face, the distance from the eyebrow to the eye should equal the height of the eye when it is open. If the subject has small eyes, keep the eyebrows low; but if the eyes are large, allow a generous space between the eye and the eyebrows. Think of the eyes as a picture and the eyebrows the frame and keep the space between in proportion to the size of the picture.



WRONG



*Figure 68*

RIGHT

The eyebrow make-up can be applied either with a dermatograph pencil or masque. If a pencil is used, do not make a hard, sharp line but draw little short hair lines following the natural shape of the eyebrows and accentuating the shape desired (Figure 68.) If masque is used, it is applied lightly with a brush.

### *The Eyelashes*

Mascara adds the finishing touch to the make-up. It brings out the eyes and makes them look larger. Artificial eyelashes are not recommended for portraits. They are used in motion picture make-up because the camera is so far away for some shots that it is necessary to exaggerate the eyelashes to make them register effectively.

If beaded eyelashes are desired, cosmetic should be used instead of masque. Cosmetic must be melted in a small container and applied to the lashes with paper liners or orangewood sticks. Repeat the application of cosmetic to the tips of the lashes until they acquire the desired beaded appearance. The bead should hold about two or three lashes.

The subject may be permitted to apply her own masque if she is

proficient, but warn her against smearing the make-up around the eyes with the mascara brush.

Masque is obtainable in several colors, but brown and black are the only shades needed in the portrait studio.

### *Application of Liquid Make-up*

With the face make-up completed, the rubberized apron can be removed and the shoulders and arms made-up to harmonize with the face. The liquid make-up used for this purpose must match the grease paint and powder color used on the face.

Start the application of liquid make-up at the neck where the face make-up stops. Apply with a stroking motion and rub one way only until dry. The liquid make-up should cover all of the exposed parts of the body that will appear in the picture, including the arms and hands. Liquid make-up is easily removed with soap and water.

If only the head and shoulders appear in a portrait and if the subject wears a dress with a high neck line, little, if any, body make-up is necessary.

### *The Hair*

It is not my intention to dwell upon the vagaries of hair dressers, but I can report, from experience, that the masterpieces they produce are not often suitable for a portrait. Women are largely to blame, of course, because when a new style of hairdress is introduced, they flock like sheep to try it. It matters not that an Empress Eugenie coiffure is totally unsuited to her; if her friends wear it, she simply *must* have it. The result is that a great many women come into the studio with one of the most important details of the make-up contributed by a third party who is not only disinterested, but is often, for the purpose of a portrait hairdress, downright incompetent.

The portrait photographer can profitably study the hairdress methods used in motion picture productions. It will be noted that the fairly long, loose "bob" predominates and that there is a noticeable absence of tight severe styles. Curls soften the lines of the face and, in effect, make a pleasing frame for it. The long oval face can be increased in its apparent horizontal dimensions by the simple expedient of wearing fuller curls at the sides. Round faced subjects



should keep the forehead clear and wear the hair soft on top to increase the vertical dimensions of the head. On the other hand, it may be necessary to bring the hair down over the forehead of the subject with a long face and excessively high forehead. Loose curls are sometimes worn well forward on the sides of the face to cover protruding jaws. Round faced subjects should not wear a wide heavy hairdress at or above the horizontal axis of the face.

Women frequently come to the studio direct from the hairdresser with a mass of small tight curls all over the head. The hair should be combed out after the make-up has been applied to soften the curls. A subject with a round face should never be photographed in a mass of tiny, set curls.

### *A Modified Make-up*

In the foregoing pages the complete Panchromatic make-up process has been described. Although I do not use the make-up as described on very young girls and women past middle age, I have used a modified form of it with success on young girls having an excessive number of freckles and skin blemishes. Instead of grease paint, I use a light base of liquid make-up, applying it carefully and evenly. A light shade of lip rouge and eye shadow is used, and the powder is applied in the usual way. Mascara, if used, should be brown instead of black.

The average woman has no objection to the use of make-up, particularly if she is convinced that, properly used, it is an aid to better portraits. The portrait photographer would, however, be wise to confine the use of make-up to women between the ages of approximately 17 to 35 years.

### *Appearance of the Make-up*

The subject, inexperienced in such matters, may show some concern during the make-up process because the orange, red, and brown colors of the grease paint, rouge and eye shadow produce a somewhat startling effect in the mirror. The explanation that the colors are selected for use with color sensitive film; that the appearance of the make-up is for the camera and not for the human eye, will set her at

ease. The assurance that the make-up will not show in the finished picture will also help to put her at ease.

### *Removal of Make-up*

The appearance of the make-up to the observer suggests another important point in connection with its use. Regardless of how flattering the make-up may be under the studio lights, it is not intended for street wear and the subject should not be permitted to leave the studio until the make-up is removed.

Cold cream is used to remove the make-up. Deposit a small amount of the cream on the face and thoroughly mix it with the grease paint by a circular motion of the finger tips. The cold cream, when thoroughly mixed with the grease paint, will dissolve it and the make-up can then be removed from the face with disposable tissue.

It is advisable to wash the face immediately with warm water and plenty of soap and rinse with cool water.

Liquid make-up is easily removed with soap and water.

### *Make-up for Color Photography*

There is, as everyone knows, considerable difference of opinion as to the relative merits of the various color processes now available. I believe it is generally conceded that the results are far from perfect, but most of us expect to see many of the present obstacles removed, perhaps in the very near future. The wide interest in color for both still and motion pictures has started feverish activity in the laboratories of the world and improvement of existing methods or possibly some entirely new process is likely to result. Manufacturers of cosmetics have spent considerable sums of money in experimental work, but I am reliably informed that the results of the make-up used in the comparatively small number of color pictures produced to date has not resulted in an agreement among make-up men as to the best methods and materials for color photography.

Regardless of what the future may bring forth, there are certain fundamental principles of make-up which are not likely to change when color processes are perfected. Retouching will always be impossible in motion pictures, and make-up is, in effect, a process of retouching the subject's face *before* the picture is made. It may



always be difficult to retouch colored still photographs in which case make-up will be necessary to cover freckles, skin blemishes, and to correct structural defects in the subject's features.

When make-up for "black and white" photography is applied, the make-up man *anticipates* the appearance of the subject in montone. But in color work, the most desirable result is a natural, life-like appearance; and this creates a serious problem for the make-up artists, particularly if the subject requires corrective work. In "black and white" photography, for example, a double chin can be reduced by the application of a blue-gray lining color to create the illusion of a shadow under the chin instead of a spare tire of fat. In color work, the make-up artist is faced with the problem of reducing the same chin with colors that closely approximate the subject's natural complexion.

Make-up for color photography must necessarily be a modified form of street or society make-up in order to harmonize with the subject's costume and surroundings. Foundation colors (grease paints, etc.) will probably be lighter in color than those now used for Panchromatic film, and they may eventually be prepared in liquid form so that a *very* thin base can be applied.

It is logical to assume that the manufacturers who now supply the cosmetics for "black and white" photography will be prepared when color processes are perfected, to supply the proper make-up for color photography.

### *Pancake Make-up*

The newest cosmetic material used by the motion picture players is the Pancake make-up prepared by Max Factor. This preparation is a combination face powder and foundation that is applied with a sponge over the cleaned surface of the face. No cream base or face powder is necessary. It is removed with soap and water. For the correct shades of Pancake make-up see the regular Max Factor chart. With this new preparation the technique of applying make-up is simplified and is rapidly replacing the use of grease paint and face powder. For complexions difficult to cover, grease paint make-up is still unchallenged.



## CHAPTER SEVEN

### Posing

What I have to say about posing is addressed to the practical photographer who, like myself, is far more interested in results than in an extensive knowledge of anatomical terms.

There is a vast difference between working with professional models who can be replaced if their qualifications are unsatisfactory, and photographing the general public. Few photographers are fortunate enough to have any choice whatsoever of subjects and, therefore, must resort to every legitimate means of correcting faults in the anatomical structure—at the same time trying to present a pleasing psychological portrait.

Nearly all photographs are made of people who not only know nothing about posing, but are far from graceful in their habits of walking, standing, or sitting down, as anyone who has developed habits of observation can testify. Dancing is now taught in many educational institutions, and young people who have enjoyed training of this kind are greatly benefited by the experience. Some people are naturally graceful in all of their movements; but even professional models and experienced actors and actresses require *direction*.

Posing is the arrangement of the physical material of the picture in accordance with the artist's interpretation of the laws of composition. The fundamental principles of composition should be so

thoroughly established in the photographer's mind that he will instinctively apply them in posing the subject.

The success of the portrait, however, depends upon its psychological qualities. I consider the stilted posing of traditional portraiture to be unsuitable for modern people, particularly Americans. The cataclysmic changes which have taken place since the World War have changed the entire psychology and temperament of the people. We are living "faster" today than men have ever lived before and the photograph is the most logical portrait medium available to us.

I advocate a complete break between the modern photographer and the traditional style in painting and photography. I expect the trend toward realism to result in unretouched photographs in full color becoming the most popular portrait medium in the near future.

The very essence of good posing is to keep the portrait from looking "posed." Regardless of how willing the subject may be to cooperate those of limited experience will find it difficult to hold a pose naturally. Instead of placing the subject in the desired position and "freezing" them there for the shot, it is best to take a little extra time and coach them. After a clear explanation and a few minutes rehearsal of the pose let the subject assume the desired position. The subject may not be letter perfect but the result will be more natural than a pose which has been arrived at by a long process of adjusting one limb at a time.

It is my experience that the better portraits are made toward the end of the sitting which, of course, is not surprising. If the subject is nervous at first it is utterly useless to waste films. Sometimes the tension can be relieved by the pretended exposure of a few films. Meanwhile the photographer should divert the attention of the subject from the camera by conversation on a subject of mutual interest.

The quickest way to sabotage all chance of a successful portrait is for the photographer to appear to be in a hurry. Scrambling around the camera and rattling plate holders should be avoided. I find that the average subject is more than willing to engage in conversation and it is unnecessary to suggest such banal subjects as the weather.

A modified "Candid Camera" technique often results in an excel-

lent shot, especially with children. With lamps and camera in readiness the subject can often be caught almost unawares or in a natural conversational pose. The child in Figure 69 might at first appear to be posed, but actually this was a spontaneous shot and was not posed at all. This method produces the best results for the photographer who cultivates the habit of observing every move as the subject walks about or sits down somewhere in the camera room. When a good pose is observed the subject should be asked, quietly, to remain in the position and the shot should be made without too much delay or rearrangement.

If full figure portraits are to be made that decision should be arrived at during the preliminary interview because there should be a clear understanding in regard to the costumes the subject will bring to the studio. The choice of poses should be made by the photographer, not by the subject. The decision to make a full figure portrait should be based entirely on the type of figure the subject may possess. Obviously the rigid standards applied in hiring a professional model are out of the question. There are, however, certain essential qualifications for the full figure portrait and many subjects will be eliminated because the camera adds ten or fifteen pounds to every adult figure. Most standing portraits will be women and the Zeigfeld type of figure is to be preferred. The tall woman, five feet eight inches or over and weighing about one hundred twenty pounds is a good subject for the full figure portrait.

### *Obesity*

The problem of obesity is a constant worry to photographers. Very few subjects are thin enough to cause concern and few are too thin to pose directly facing the camera. Most portraits are three-quarter views of the body and face or at least the subject is turned at a slight angle to or from the camera. Many women, even of normal weight, have excess flesh in places where it is a problem to dispose of it. There is some hope for improvement through the use of better foundation garments. The apparent bulk of the corpulent figure can be reduced somewhat by careful management of the lamps, keeping them in the contrast region of both the floor plan and





*Figure 69*



*Figure 70*



*Figure 71*

elevation zones.

The most effective remedy, however, is to use the three-quarter view and to avoid full views of body, face, or limbs. In most cases, it is best not to show any more of the body than necessary because the corpulent figure appears to defy all attempts to reduce its apparent bulk. An example of this type is shown in Figure 70 and Figure 71 and the reader will note that the three-quarter view is a decided improvement over the full face shot.

### *The Face*

The subject's face is the center of interest in every portrait and all other portions of the composition must be subordinated in posing and lighting.

The proportions of the face are an important consideration. The majority of artists in the past have favored proportions in the ratio of three for the vertical to two for the horizontal axis of the face, although a minority favor a four-three ratio. Raphael employed the four-three proportion almost entirely, and this same conception is apparent in the later French school represented by Renoir. There

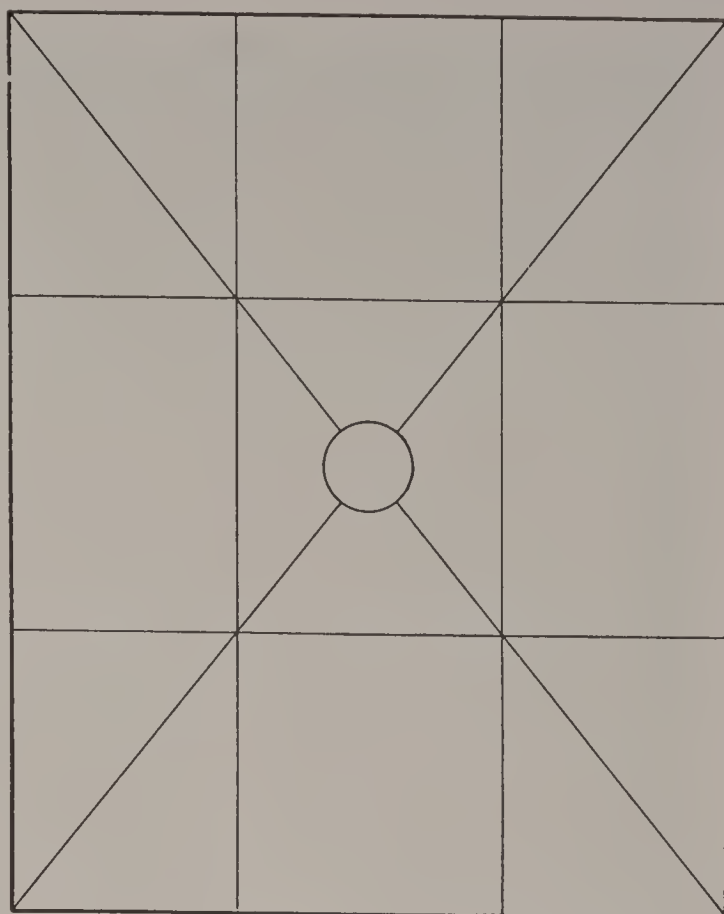


Figure 72

are four methods of correcting faces that vary from the ideal proportion. These are make-up, costume, lighting, and posing. Obviously, we cannot apply all of these corrective measures to the average subject, but the most effective method should be used. For example, a bald headed man usually appears to have an excessively long face, and one of the most effective ways to shorten his face is to have him wear a hat.

A face that is longer in relation to its width than the ideal established by artists may appear *thin* to the eye but posed directly facing the camera with rather flat lighting the results are often surprising. A face that is too wide in proportion to its length should be posed for three-quarter view, with contrasty lighting.

### *Composing the Portrait*

There is no satisfactory substitute for the ground glass for composing the portrait. The chief advantage, of course, is that the image appears on the glass precisely as it will appear on the negative.

Some photographers have the ground glass subdivided by etched or drawn lines to assist them in visualizing the relation of the image to the picture space (Figure 72).



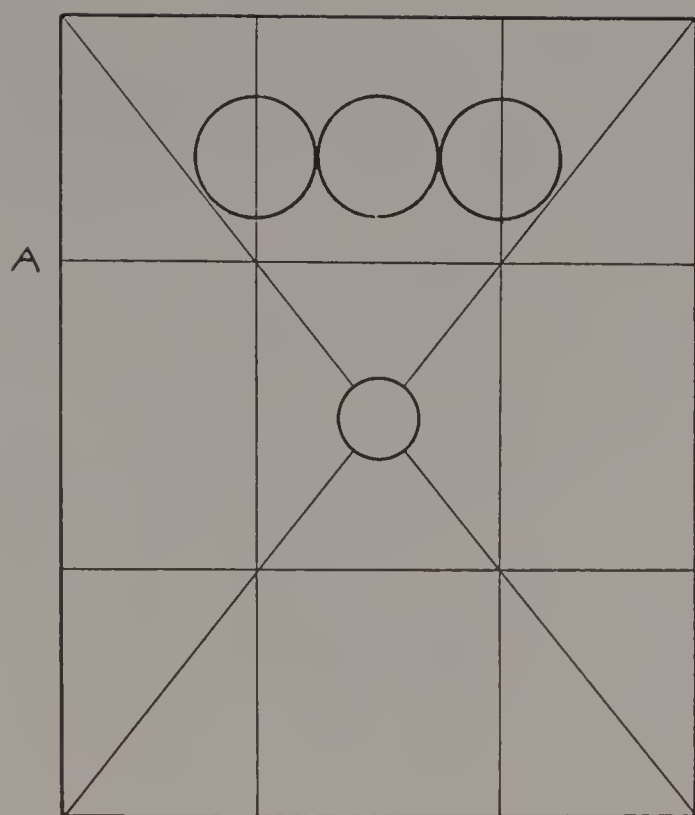


Figure 74

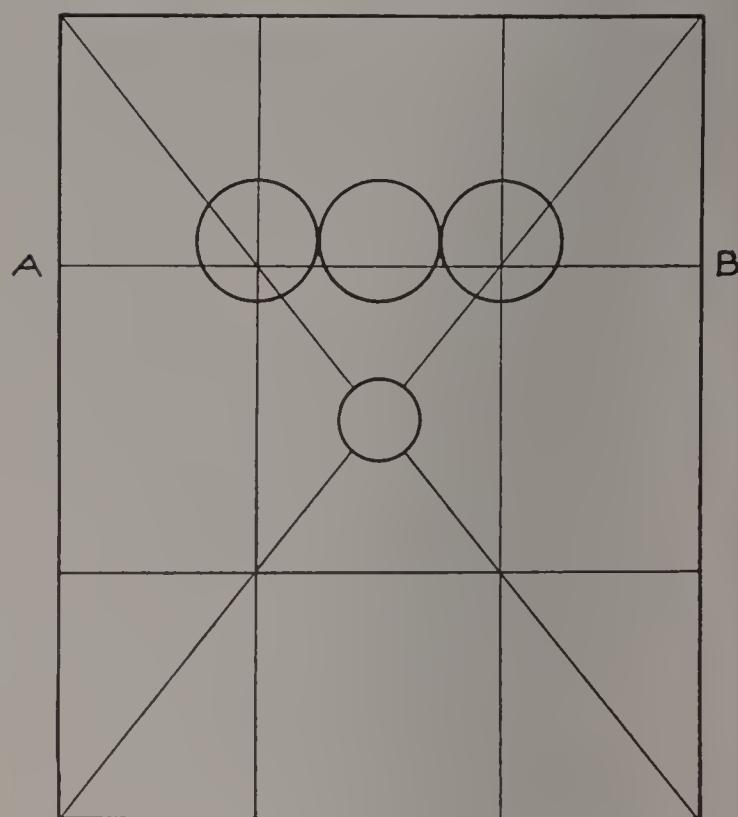


Figure 75

The principles involved in the correct placement of the portrait image on the ground glass are few in number and easily understood. First, of course, and most important is that when the figure is posed for three-quarter views there must always be more space in *front* of the subject on the ground glass than behind. Another fundamental principle is that the unusually tall subject should have more space above the head than the abnormally short subject. The psychology involved is that the amount of space above the head in the finished picture tends to suggest the height of the subject. If we look at the portrait of a man whom we know to be excessively tall, lack of space *above* the head attracts our attention and accentuates a physical characteristic which may be a source of considerable annoyance to the subject.

There are very few portraits *strong* enough to occupy the exact center of the picture. A possible exception is the symmetrical portrait that fills most of the picture space (Figure 73).

The head of the subject will be above the line A-B (Figure 74) in nearly all full figure portraits. The heads of subjects photographed in a sitting position (full or three-quarter view) should be approximately on the line A-B as shown in Figure 75. The eyes should be



*Figure 73*



Figure 76



Figure 77

*The lower camera angle in Figure 76 over-emphasizes the jaw and the length of the neck. Notice how matters are corrected by bringing the camera up to eye-level, (Figure 77).*

above the center of the picture space in the large head portraits.

### *Camera Height*

The height of the camera in relation to the subject is commonly referred to as the "camera angle." A low camera angle usually means that the camera is lower than the subject; at least lower than the head and high angle means that the camera is higher than the subject. If the subject has normal face and figure the lens should be used at or a little below eye level for bust portraits. This is a subject on which there is a considerable diversity of opinion but it really is not worth worrying about because of the scarcity of *normal* faces. As a matter of fact it is possible to use the wrong camera angle even on the normal face and this is demonstrated in a striking manner by a comparison of two photographs made especially to illustrate this point. (Figure 76 and Figure 77.)

The photographer who uses lenses of short focal length must be especially careful because that portion of the figure nearest the camera is always accentuated. The subject with a weak jaw is





*Figure 78*

benefited by a low camera angle but this is disastrous to the subject with a protruding jaw. A high camera angle lengthens the nose and a low angle shortens it. (Figure 78.)

The height of the standing figure is accentuated by a low camera angle. By a low angle I mean that the camera should be placed practically on the floor for the maximum results. The better way is to have a platform or stage on which to pose the standing figure. Placing the camera on the floor is awkward because in order to focus it is necessary to crawl under the focusing cloth on hands and knees like a gopher. This is not recommended for the paunchy photographer or those who affect a heavy professional manner to impress customers.

### *Posing the Standing Figure*

A graceful picture of a figure standing without the support of furniture or accessories is a real test of the photographer's ability. Art training in posing the nude figure is very helpful in this respect.\*

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\*A great deal of very helpful information on the subject of posing will be found in William Mortensen's book, "The Model: A Book on the Problems of Posing." Camera Craft Publishing Company, \$3.00.

The standing figure posed against a plain background is generally unsatisfactory as a portrait. One reason for this is the psychological suggestion of a fashion photograph because of the plain background. In other words the picture requires explanation to distinguish it from a fashion plate. The most satisfactory way to do this is to photograph the subject in her own home, in the surroundings familiar to her family and friends but unfortunately this is seldom possible.

The other extreme is the painted curtain or backgrounds composed of pillars and pedestals. These time worn devices can be traced back through three hundred years to what is known as the *Grand Style* of portraiture which reached its peak in the work of Reynolds, Gainsborough, Romney and Rubens. (Figure 79.)

It is unfortunate that the early photographers sought to emulate the *Grand Style* in elaborate posing and painted backgrounds for they earned the disrespect which competent artists have, even today, for portrait photographers. Many studios still cling to the traditional style, if not with a hideous back cloth, then by resort to "print in backgrounds" which are almost as bad.

I am convinced that the modern portrait photographer can make full figure portraits of sound artistic merit but they cannot be made without intelligent effort, and reasonable compensation. The first requirement is suitable subjects, with good figures and appropriate costumes.

Contemporary furnishings, selected for pictorial possibilities, will be found in the better homes and with the portable lighting equipment now available the home is a logical choice of location for many portraits. The chief objection to the studio for full figure portraits is that it is expensive and difficult to furnish a new and different background and furniture for each portrait.

If the home is decided upon as a location, the house or apartment in which the subject lives and the kind of wearing apparel she owns are valuable clues to the character of the subject, her family and friends. Careful consideration should be given to all of these matters and the subject should be posed in a manner appropriate to the surroundings. Whether the poses are to be formal or informal will





Figure 79

*Peter Paul Rubens*

*Courtesy E. A. Seemann*





*Figure 81*

depend largely upon the subject's wardrobe. Some garments are suitable only for a formal pose (Figure 80). The modern trend, however, is definitely toward the informal, particularly for young women (Figure 81).

The living room is, of course, the most popular room for portraiture. A fireplace often makes a good background unless there are too many angular lines or other disturbing factors. There should be a feeling of repose in the full figure portrait and in most cases the subject will be seated rather than standing. Flowing, graceful lines are essential. Arms akimbo, or behind the head or holding up a leaning figure are disturbing.

It is possible to compose effective portraits in the studio with very few properties. In Figure 82 we have an example of how a portrait figure can be balanced by still life or small decorative objects



*Figure 80*

of art. Furniture and “props” should be unobtrusive and they must at all times be of secondary interest in a portrait.

### *The Head*

For several years prior to the publication of this book, there has been an epidemic of large head portraits. This is largely due to the introduction of mass production methods in portrait photography and to the fact that it is commonly believed that large head portraits are easily made.

As a matter of fact, really good large heads require careful thought and skillful posing because when the head is enlarged to become the most prominent part of a portrait, the faults in technique and posing are magnified.

The rules of composition must be applied in the large head portrait just like in any other picture. The relation of the head to the picture space must be considered when the photograph is made so that there will be plenty of space in the negative to produce a sound composition. The head must be supported—it cannot be left suspended in mid-air. And, to support the head, particularly if it is leaning to one side or the other, the shoulders or the arms or the hands must be shown. Support can often be suggested by the position of the shoulders. If the neck is curved and the head tilted the shoulder should be higher on the side toward which the head is turned to suggest support. The curve of the neck must be graceful. Angular lines in pictures are often useful if the subject is of active, dynamic personality.

Every face has an architecture of its own. There are few really normal faces. A perfect nose is seldom seen, and chins are a constant problem. Some subjects have prominent noses and weak chins; others have small noses and protruding chins. Combinations of this kind are difficult because the photographer is often at a loss to know whether he should attempt to correct the imperfect chin or the nose, because in most cases it is impossible to do both. In the majority of cases, it is necessary to compromise, and this is usually accomplished by careful selection of the camera angle. The camera angle should be





*Figure 82*



*Figure 83*



*Figure 84*



*Figure 85*

high—at least eye level to avoid emphasis on the prominent chin, and this same method should be used for the subject with a short nose. A low camera angle is necessary for a receding chin.

In order to catch the personality of the subject, it is best not to pose the head too carefully, because most subjects have a characteristic tilt or turn of the head which if the subject is at ease will soon become evident.

In all photographs of the head, the eyes are the most important. It is surprising how many people have one eye larger than the other, and it is a good idea to avoid posing the subject with the larger eye near the camera.

### *The Hands*

One of the reasons for the “large head” picture is that many of the photographers practicing today simply do not know what to do with the hands. It is utterly impossible to use the figure in a portrait without disposing of the hands in some manner. Instructing the subject to “just let the hands fall naturally” usually causes trouble. The very wording of this request defeats its purpose because the subject becomes conscious of the hands and is placed in the impossible position of having to decide what is a natural pose for them.

Reproductions of portraits by great painters are available for study in every first rate library. If art school training can not be obtained in the community the photographer will find plenty of



*Figure 86*





*Figure 87*



*Figure 88*

amateur models among his friends who will gladly permit him to experiment with their hands.

If the hands appear in a picture they must be considered as a part of the composition but always subordinated to the face. It is a safe rule that if the hands attract undue attention there must be something wrong with the posing. Examples of errors that attract attention are the "claw," the "sign" and the twisted fingers of despair (Figures 83, 84, 85).

Posing the hands in the subject's lap is far easier than placing them in the vicinity of the face or neck. Many of the "pretty" poses of traditional portraiture are totally unsuited to the modern portrait subject, particularly from a psychological point of view (Figure 86).

The hands should be posed in the same plane as the face because if they are nearer to the camera than the face and figure of the subject they are likely to be distorted in size. Hands always look smaller when the edge of the hand is shown rather than the width (Figures 87-88). The "broken wrist" is another error which introduces angular lines into the picture (Figures 89-90).



*Figure 89*



*Figure 90*

When light colored backgrounds are used protruding fingers should not be permitted to stand out in relief against the background for under these circumstances the hands become entirely too prominent.

It is, of course, apparent to the reader that I have no intention of presenting a standardized set of poses. This would reduce the subject to a mere mail order catalog; of no practical use to anyone except those who go through a regular routine with subject after subject until almost every motion can be anticipated.

Instead, I am going to suggest a course of self instruction for the intelligent and ambitious photographer. I believe there is, in my suggestion, the basis for an entirely new camera room technique with unlimited possibilities. What I have in mind is a modified "Candid Camera" method except that a camera not smaller than 4x5 on a tripod is recommended.

The photographer instead of learning a long rigmarole of hackneyed poses, should study correct posture. He should investigate the method of dramatic coaches who instruct actors and actresses in poise and grace.

For example, an actress is taught that the hand should follow the line of the arm either in action or repose. Leaning back on the arm for support, the fingers should be pointed *backward*, not forward, so as not to twist the line out of shape at elbow and wrist.

Watch motion picture actresses move across the screen to a slow even tempo and compare the graceful motion with the ridiculous jerky motions of the home movie. It is a fundamental principle of good posture to carry the hips (or pelvis) well forward, keeping the knees limber.

All of these “tricks of the trade” are a part of the principles of body alignment. Once understood and properly applied they open an entirely new field for the enterprising photographer.

### *Character Studies*

There is always one pose that is best suited to the subject—whether it is called a “natural pose” or a characteristic one the competent photographer *knows* when he has discovered it. This may require several hours and a lot of films and no photographer can be successful if he is niggardly in such matters.

Figure 91 shows a profile view of a very charming woman. I have made many pictures of this subject, but this is the result of an effort to discover the most effective pose.

The reflex action of the muscles of the eye, which causes everyone to wink at regular intervals may cost a film now and then but I would rather lose the film than to place the subject on the defensive by the admonition to “hold it.”

The eyes should be looking in the direction the subject is facing—looking out of the corner of the eye suggests cupidity and furtiveness. The eyes should be wide open and if facing the camera the subject should look slightly above the lens.

### *Posing Groups*

A group photograph is simply a multiplication of the problem involved in posing the single figure. Each figure is a unit of the whole and as such must be correctly posed individually and in harmonious





*Figure 91*



*Figure 93*

relation to the other members of the group (Figure 92).

Grouping of figures generally involves the use of a geometrical pattern, the triangle being the most popular. The principal thing to avoid is heads posed on the same level. The portrait photographer often finds it necessary to sacrifice some of the technicalities in order to obtain an intimate and characteristic portrait (Figure 93).

Large bridal groups are examples of subject matter that is difficult to compose. Many pictures of this kind are made in homes where the photographer has very little choice of surroundings. Stair cases and fireplaces have been overdone in bridal portraits for years but the costumes and ceremony are too deeply rooted in tradition to yield to progress.



*Figure 92*



## CHAPTER EIGHT

### Portraits of Women

Most photographic portraits of women are quite obviously made with the intention of flattering and glorifying the subject. The fact that the finished pictures may only resemble the subject in a general way apparently is of little concern to many photographers so long as they can collect money for them. It is a common occurrence for people to say, in reference to proofs, "Oh, these are only the proofs—the finished picture will not look like these."

When the finished photograph is materially different from the proof, it is evident that something must have happened to the negative and the retoucher is the logical suspect. But, let us examine the facts before we form a hasty opinion. As far as I have been able to discover, retouchers do as much work as possible on a negative; and I have yet to find one who requires urging to do an excessive amount of retouching. The problem, in fact, is to control them, for they seem to think that the photographer expects them to do wonders with negatives and they certainly try to live up to expectations. Some photographers apparently believe there are mysteries about retouching a negative known only to retouchers, and they accept without question, negatives, which for the purpose of producing a likeness of the subject, have been ruined. The fact that a photographer deliberately makes prints from negatives which have been subjected to an attack with pencil and knife in the hands of a third party who,

in the majority of cases, has never seen the subject, places the responsibility squarely upon the photographer. If he does his own retouching, it is even worse for his action cannot be blamed on an incompetent retoucher. Retouchers depend upon photographers for employment, and this in itself points to the responsibility of photographers for failure to control negative retouching. The photographer who regards a portrait as an exact likeness of the subject, will find it advisable to give the retoucher precise instructions in regard to every bit of work on each negative, and to positively forbid any unauthorized work.

I reached the conclusion a long time ago that many of the practices of portrait photographers could be traced to a psychological twist—a subconscious idea that a photograph is a *temporary* art form and a portrait a glorified snapshot. On what other ground can one explain the actions of a man who accepts money for something that by no stretch of the imagination could be regarded as a characteristic likeness of the subject and worthy of permanent preservation?

The camera has possibilities that are not even approached by most portrait photographers. No artist has ever lived or ever will who can produce a likeness of his fellow men with the accuracy and fidelity of the camera. As a matter of fact, the most important advantage the camera has over pencil and brush is its ability to record form, expression, and character with unfailing accuracy. The butchery of negatives by third parties who have, in many cases, no artistic sense whatsoever, is the prostitution of the camera's finest attribute. It is, of course, too much to expect that the majority of photographers will ever produce really fine portraits, because the very nature of photography exposes the profession to incompetents and mountebanks. Men who could not draw a recognizable sketch of a coffee pot can buy a camera and represent themselves to be photographers and the monstrosities they produce as works of art; i. e., "portraits." The public unfortunately has no protection against these jackals because unlike the profession of medicine and law, there are no standards of education or ability to be passed before the applicant is admitted to practice.

That the great masters of portrait painting were interested in the psychological aspects of portraiture is a matter of common knowledge. The most magnificent portraits ever painted were character studies, as well as technical masterpieces. It is in the lack of characterization that the portrait photographer most often fails today, and what is more alarming, he shows very little inclination toward improvement.

The photographer cannot, of course, devote all of his time and attention to the matter of psychology and characterization because these matters are only a part of the making of a fine portrait. Make up, costume, posing, and lighting are all important. The successful portrait is actually a result of the coordination of all of the factors that go into the making of a picture. The photographer who develops the greatest skill in coordinating the various steps in the making of a photograph will naturally produce a superior portrait.

### *Costume*

For example, many studios produce large head prints almost exclusively, and thereby eliminate two of the most valuable aids in characterization, which are the use of the figure and costumes. Other photographers deliberately photograph women in the latest fashions and then, in a few months, telephone and suggest new pictures because the costumes worn in the previous pictures are now "out of style!" This is supposed to be good business, and it is even encouraged by manufacturers of sensitized photographic materials who suggest it as a means of increasing sales. Like many of the catch-penny tricks used in business, it is not actually illegal. Whether it is done because of greed, stupidity, or downright dishonesty, the victim is likely to suspect the motives of all photographers who suggest the use of costume in portraits.

The simple facts are that *costume correctly used as a part of an artistic composition will never go out of style* (Figure 94). Evidence to support this statement exists in every first rate art gallery on earth. The costumes worn by the subjects in the most magnificent portraits ever painted were contemporary costumes, but no one would venture to criticize the picture because the garments are "out of style."





*Figure 94*

*Changing styles will not take away the charm of this portrait because the hat is correctly used as a part of the composition of the picture.*



*Figure 94-A*

Figure 94-A shows an attempt to capture something of that quality in a photograph.

The selection of costumes should never be left to the judgment of the subject. One of the chief benefits of the preliminary interview is in having an understanding with the subject as to what costumes are to be used, so that when she arrives at the studio she is actually prepared for a portrait.

### *Jewelry*

Nearly all women bring jewelry to the studio, but it is rarely used. I decide whether or not a certain piece of jewelry is to be used by a very simple test. The subject is permitted to wear it while the camera is being focused, and if it attracts my attention on the ground glass I have it removed. My theory is that any object that attracts undue attention on the ground glass is sure to be a distracting influence in the finished picture. I have no objection to a small wedding ring—but all other jewels are regarded as being of questionable importance.





*Figure 95*



*Figure 96*

Wrist watches, and ear ornaments are definitely out.

A sense of good taste is invaluable to the photographer of women. Questions arise a hundred times a day involving matters of taste. I made a photograph especially to illustrate this point (Figure 95). A woman may have very beautiful shoulders, but this does not excuse pulling an ordinary street dress down in the manner shown, yet a national photographic publication recently published a similar photograph as a good example of portraiture. A drape arranged in a similar manner is not objectionable, but no civilized woman would wear a dress hanging off one shoulder, because of the discomfort if for no other reason. An artificial beauty mark may be a huge success at a cocktail party, but it ought to be removed for a portrait. It would be utterly impossible to even suggest the ramifications of this matter of good taste, and some of the problems require tact and diplomacy of a high order.

The selection of costumes for each subject should be based entirely upon the kind of portrait to be made. The first question to be decided is whether the portrait is to be full figure, three-quarter,



head and shoulders, or a variety of poses including all three. The possibilities of hats, furs, and other accessories should not be overlooked. Hats can be suggested if the subject has an extremely high forehead—furs because they can be used to cover a long neck.

The influence of Hollywood is a potent factor in fashions. It is not generally known that the high neck line originated in Hollywood, not in Paris; and it was a lighting problem that started it. The fact that the camera adds weight makes it necessary for motion picture actresses to keep their weight down to the extent that the collar bones cast ugly shadows which of course cannot be retouched.

There was no way to solve this problem by lighting, so the studio fashion designers made dresses with neck lines high enough to cover the collar bones. Women everywhere, influenced by motion pictures, accepted the style though, as might be expected, high neck lines are as unsuited to some women as the extremely short skirts so popular a decade ago were to others. High necks are fine for the woman with a long neck and high collar bones, but they should not be used in portraits of women with short, fat necks. Although I have very little enthusiasm for drapes in portraiture, I have often devised a very satisfactory substitute for a waist, with a piece of black velvet. If a low V neck is required for a subject who has not a suitable costume, the velvet may save the day (Figure 39).

Making portraits of a woman who has a well selected wardrobe is a pleasure, because the style or design of a costume often suggests a suitable pose (Figure 96).

Colored print dresses photograph beautifully with Panchromatic film, but solid colors are to be preferred. Large flower patterns in prints tend to draw attention from the subject's face to her dress. Satin is one of my favorite materials, especially in ice-blue, gray, or ivory. It is almost axiomatic that white or very light colors will be avoided in portraits of large, heavy women. Print dresses, with tiny flowers or figures, are very bad for large women because the large number of small spots emphasizes the bulk of the figure.

Light colors are nearly always best for youth, and darker tones for women past middle age. Women, at all times and everywhere,

dread old age and their efforts to preserve a youthful appearance keeps the smoke pouring from the chimneys of innumerable cosmetic factories. The modern woman who has the necessary time and money for beauty treatments often appears much younger, to the casual observer, than she actually is. Discussion of age, even in the form of a suggestion as to suitable costumes, is treading on dangerous ground and the utmost tact is required.

Modern women who have no children often become very fond of pets, and the photographer should not overlook an opportunity to make an unusual and pleasing portrait (Figure 97).

### *Dressing for the Portrait*

A studio designed for portraits of women should have a well equipped, warm and comfortable dressing room. Besides a dressing table for make-up, a full length mirror should be available—at least in the larger studios. Consideration for the ease of mind of the subject suggests a door that can be locked and an electric buzzer to indicate that the subject is ready for attendants to enter.

I cannot emphasize too strongly that success with portraits of women depends largely upon attention to details. At least half of the time required for a portrait in my studio is devoted to costume, make-up, and preparation for the picture. Make-up should *always* be applied before putting on the costume selected for the picture. And after the make-up and costume are ready, check every detail for the small defects that spoil pictures. Exposed shoulder straps, loose strands of hair, and hair pins that reflect light are examples. In full figure portraits, the subject often forgets to change into the shoes that belong with certain costumes.

### *Lighting*

I don't know how old a woman has to be before she stops worrying about wrinkles. I photographed a woman on her 100th birthday, and she insisted that there were wrinkles in the photograph that she did not have on her face. Wrinkles cannot be removed or successfully covered with make-up and careful management of lights is necessary.

Wrinkles are accentuated by contrast lighting and the lamps should not be elevated into the contrast zone in height or operated



in the contrast region of the floor zones. Women are most sensitive about wrinkles at middle age when signs of age just begin to appear.

Young women with regular features and smooth skin texture are the photographer's ideal subjects. There are literally hundreds of possible interpretations of the fundamental lighting principles described in this book, and the enterprising photographer can make portraits of women for years without exhausting the possibilities.

For example, contrast lighting which as a result of the Hollywood influence is used by hundreds of cameramen. Yet, we seldom see two photographs that are alike. Contrast lighting can be done from above, below, and from either side of the subject and a slight change in the position of the lamps produces an entirely different result. An endless number of lighting diagrams have been published at various times but they are all variations of the fundamental lighting principles which have been reduced to their simplest form in diagrams under the subject of "lighting" in this book. As a matter of fact, some photographers perfect a technique in a particular kind of lighting and all of their portraits are lighted in the same general way with occasional unimportant variations.

Blondes sometimes have such delicate coloring that diffusion may have to be resorted to in order to preserve the flesh tones and the fine texture of the hair. Heavy spotlights should be diffused or kept far enough away to prevent over exposure of the hair, which, being light in color, reflects more light than brown hair (Figure 39).

A spotlight used for highlighting the hair need not be more powerful than 250 to 500 watts. Spotlights in the capacity of 1,000 or 2,000 watts and in motion picture photography even more powerful are used, but they are kept at a distance, diffused or operated with an Iris diaphragm in order to control the light beam.

### *Notes on Posing*

Selecting poses that are suitable for a particular subject requires excellent judgment. The photographer who earns his bread and butter making portraits of women is not only concerned with the character of the subject but with the *probable* character of her family and associates. It is nearly always a mistake to use exotic





*Figure 97*

poses and dramatic lighting if the subject is a member of a conservative family. A true psychological portrait should be closely related to the way a woman appears in everyday life, and to her family and friends. Women from the best families conform to the customs of the community, particularly in wearing apparel and personal appearance. Make-up, costume, posing, and lighting must, therefore, be coordinated so that the final result will be a portrait of a particular woman and not a mere mannequin.

### *Portraits of Beautiful Women*

One of the silliest notions I have ever heard is that the beautiful woman is easy to photograph. The facts are that the average attractive woman is comparatively easy to photograph because with make-up, good lighting, and suitable costumes, she can be transformed, Cinderella like, into an effective portrait subject. But the beautiful woman (of whom there are very few) presents an entirely different problem. She needs no artificial glamour and little, if any, make-up. It is unnecessary for anyone to glorify her—but merely to do justice to her beauty. This requires all of the ability of the finest portrait photographers.

### *The Man Behind the Camera*

American women dominate men by feminine methods familiar to everyone. Whether this is good or bad for the country is something experts in such matters will have to decide, but such a situation is intolerable in the portrait studio. The photographer must control every step in the making of a portrait. He must believe in his own ability even in the face of criticism, for there are people in this world who cannot be satisfied regardless of how good a portrait may be. He must have the courage to believe in the product of his own hands, and to back his judgment at all costs.

If he knows his business and believes in himself, he will have an assurance of manner that goes a long way toward winning the confidence of the public.

Personality and appearance are extremely important to the professional man who specializes in portraits of women. It should not be necessary to suggest frequent baths, fresh linen, and shaving at

least once every day, but it is surprising how many photographers offend in such matters. The photographer should dress well on all occasions for the sake of his reputation in the community.

It should be remembered that word of mouth advertising is the most expensive in the world, because it takes a much longer time to reach a given number of people than newspapers or other advertising media. Word of mouth advertising can be either good or bad, and incidentally, women are supposed to have a monopoly on this particular form of advertising.

Portrait photography is hard work, and good health is a requisite. Women admire strong healthy men, and the value of regular exercise can not be overestimated. I do not argue that the successful photographer should have the physique of a lifeguard—but I think it would help.



## CHAPTER NINE

### Portraits of Men

A friend of mine, as an amateur photographer, cherished an ambition for many years to own a studio and to make portraits of men exclusively. He expected, by specializing in portraits of men, to escape all dealings with women and to make character photographs with little or no retouching. It wasn't long until he found, to his amazement, that a woman was involved in almost every transaction. In fact, my friend reports that it is a frequent occurrence for a woman to handle every detail except actually sitting for the portrait.

The majority of men after they have had a portrait made will not have another one until forced to do so. Actors are an exception—but few men have the colossal vanity that distinguishes an actor from the ordinary man. Events in the lives of prominent men are frequently illustrated in publications by photographs made so long ago that not even the man's intimate friends can recognize him.

The influence of women suggests the idea that it is good business for the studio to sell portraits of men through advertising directed to women.

#### *The Preliminary Interview*

It is difficult to arrange advance interviews with men, but the results are well worth the effort. The stock excuse will be that he is too busy but if the truth could be known, he is simply afraid to admit his portrait is *that* important. Years of careful observation have

convinced me that the average business man ought to complete his office work in two hours a day or less. But decisions on the most trivial matters are sidetracked and callers are told to return the next day or next week simply because the man won't make up his mind. The photographer is selling something that men seldom buy of their own volition, so considerable sales strategy is needed. If the portrait is wanted by mother, wife or sweetheart, enlist her aid. The American business man may be a roaring lion in the market place, but he jumps through the burning hoop with alacrity when his wife cracks the whip.

If a woman is interested in a man's portrait, her presence upon the occasion of the advance interview is a decided advantage because it gives the photographer an opportunity to win her confidence. She is sure to have the last word in the selection of proofs, and she will suggest more people who should be presented with a photograph than a man could ever think of.

The primary purpose of the interview is to impress upon the subject that a *portrait* is more than just a picture. The photographer must have control of the situation at all times and the advance interview is the logical time and place to start. Too often, men of affairs try to shift the burden of responsibility for the portrait onto the photographer by treating the entire transaction as a nuisance. Accustomed to pushing representatives of the press around, he can be expected to gallop into the studio at his own convenience and bark, "Let's get this over with." Two clicks of the shutter, and he reaches for his hat saying, "You've got enough." The closing lines of this routine are, "You pick out a good one and fix it up—you know what I ought to have."

Obviously, the *man* has not been photographed—but only a stuffed shirt with the label "Vice-President" on it. It would be far better to flatly refuse to make a portrait except under conditions which afford a reasonable opportunity of success. I have, on two occasions, declined to photograph one of the owners of a corporation that is among the largest of its kind in the world. Had I made the pictures under the conditions prevailing at the time (on one occasion

he was suffering from a heavy cold) I would have received a few paltry dollars, for something that would be viewed by hundreds of wealthy and prominent people to my everlasting regret. As the matter stands today, I have my self-respect, which is worth more than money and the respect of a man who has added to my reputation as a photographer by his approval of my methods.

A successful portrait requires the cooperation of the subject in *spirit* as well as in body. If a man is reluctant about spending his time or making an honest effort to cooperate, then it is best to be frank and appeal to him by logical reasoning. Here is an example: "Mr. Jones, you own a steel mill and your success is proof of a sound knowledge of the steel business. You know more about steel than I could learn if I spent the remainder of my life studying it. On the other hand, I have devoted the best years of my life to portrait photography, and my portraits are evidence of my qualifications.

"If I buy steel from you, your reputation is the best possible guarantee of quality. But, I must buy from you at *your* price and according to *your* terms and conditions of sale, which presumably net you a profit—the ultimate aim of all business. The successful conclusion of the transaction depends upon confidence between buyer and seller. In order to produce a portrait that will be satisfactory to both of us, I must have your confidence in my ability to specify the conditions under which a successful portrait can be made, and you should be willing to spend the time necessary to do it."

### *Psychology in Characterization*

If a woman is attractive, her portrait is justified by a faithful reproduction of her beauty. But a man is noted in life and after he has gone for *achievement* and his portrait must take into account the activities of his life. Women are admired for *themselves* and men for what they *do*.

A man's environment is sure to leave its marks upon him psychologically as well as physically, and it is not for the photographer to judge whether or not he has devoted his energies to laudable enterprises.

I know a man who is invariably referred to in the newspapers as





*Figure 98*

a “millionaire sportsman.” Rumor has it that the fellow squandered his inheritance, that he has never done an honest day’s work in his life, and swears he never shall. But he is an accomplished entertainer, wears clothes well, and always finds someone willing to finance him. I photographed him as a “playboy” in appropriate poses and costumes—any other course would have made us both ridiculous.

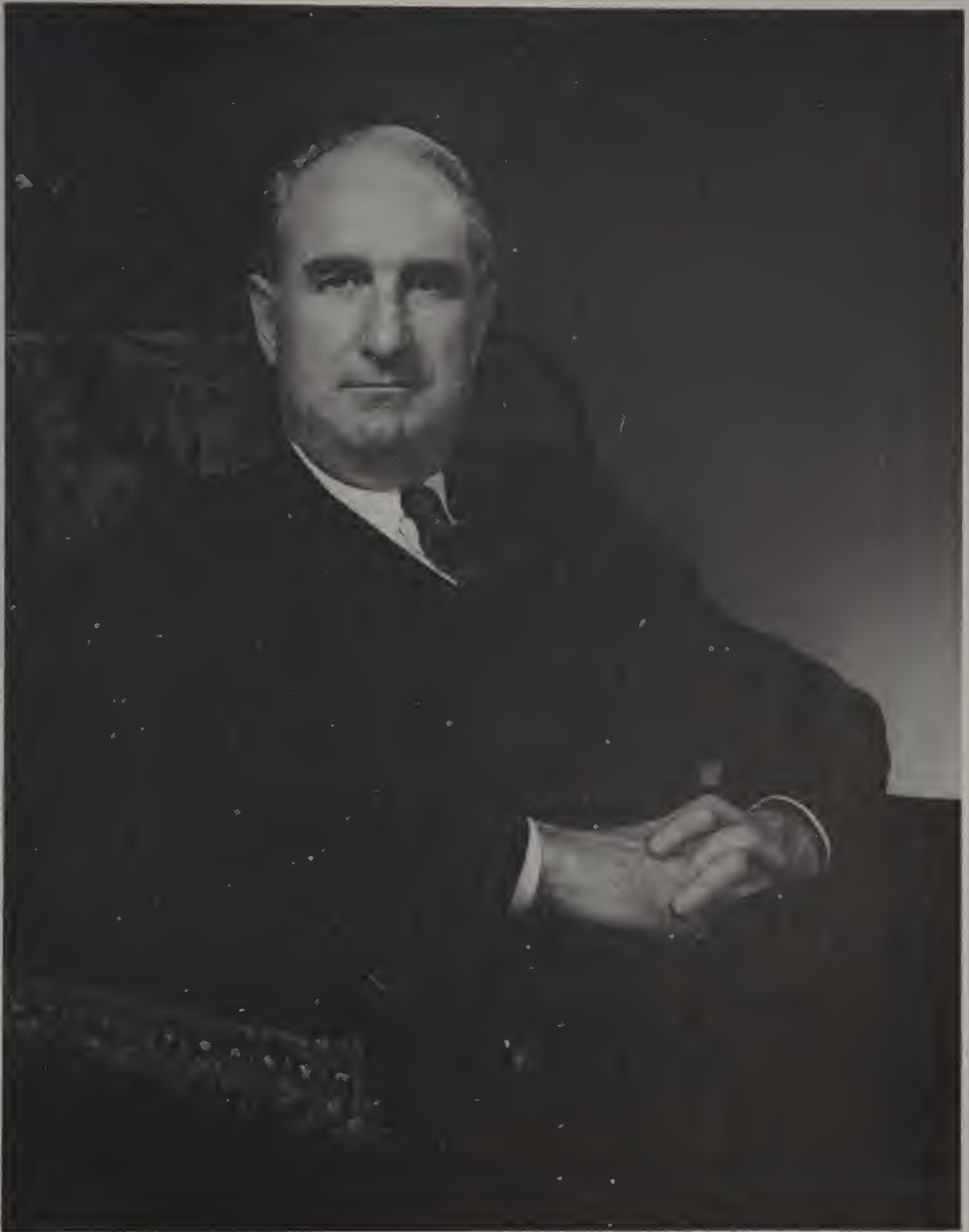
Costumes, backgrounds, furniture, and lighting are valuable aids in portraits of men. Sometimes the surroundings offer the most effective means of establishing the psychology of the portrait (Figure 98). The tycoons of modern business are good examples of portrait subjects whose characters are inseparably bound up with achievement. Starting in most cases, as poor boys, they have spent their entire lives accumulating money. Vast wealth is a source of endless wonder; and the newspapers naively print stories of the rich man’s town and country houses, yachts, and racing stables, until these possessions become symbols of the man’s wealth and power. The fact that the man accumulates so many things that he cannot possibly find

time to use is in itself an index to his character. Such a man is a veritable Colossus of such psychological stature as to almost preclude a studio portrait at all. Perhaps a portrait at his desk in a banking establishment or in front of a baronial fireplace with an enormous dog at his feet would convey the idea of *possession*. Many readers will argue that the man's character could be portrayed by a head and shoulder picture and that the surroundings I have suggested are too obvious. I heartily disagree because the desire to possess so dominates the man's life that it could scarcely be indicated too strongly in a portrait.

Edward Steichen is a master of psychological portraits of men. Featured for many years in "Vanity Fair" (since combined with Vogue), his portraits were a magnificent contribution to contemporary photography.

One of the cardinal principles of salesmanship as outlined in every manual on the subject is to make diligent inquiry in regard to the hobbies of the prospect in order to meet him on the common ground of mutual interest. Photographic publications have been advocating this idea for years, but I want to warn the reader that unless he has a real and sincere interest in the particular hobby, there is no use to attempt a discussion of it. When a total stranger presumes upon my time to discuss something that he knows very little about, I am instantly aware of it and it arouses me to fury.

Last Fall, I made a portrait of a Vice-President of an international advertising agency. One of my scouts reported that he was as "cold as a fish" and predicted that there was a total absence of human emotions. When the man came into the camera room, he confided that he had suffered all his life from self-consciousness and that he had been unable for this reason to obtain a satisfactory photograph. Instead of trying to force the conversation, I decided that he was doing fine and I simply listened. He soon volunteered the information that he was leaving in a few days for a vacation and that he would arrive at his boyhood home about "hog-killing time." This was a subject of real interest to me, and it reminded me of many experiences of my youth that I could describe with enthusiasm. The result was a



*Figure 99*



pleasant half hour during which photographs were never again mentioned, but during the conversation I was making excellent negatives in which the subject showed no trace of self-consciousness.

### *Lighting*

The lighting of a man's picture should emphasize his physical strength as well as his character. Men have stronger, larger features than women, and lighting should be *masculine* with heavier shadows than it is advisable to use on the comparatively delicate feminine features.

Nearly all portraits of men will be made with the lights ranging from normal into the contrast region of the elevation and floor plan zones.

Low key lighting with a short scale of tones ranging from gray to black is especially appropriate for men of mature years. There is a certain dignity in this method of lighting that cannot be obtained with the more contrasty effects.

A good example of this type of lighting is shown in Figure 99. The subject was dressed in a dark suit and the chair in which he was seated is deep red. At first glance it may appear that this is a long scale print, because the subject is wearing a white collar and the tones extend into deep black. But the white collar can be ignored for it is a single isolated note widely separated from the *actual* tone scale which ranges from gray to black.

High key lighting is very effective for portraits of young men. A white shirt, open at the neck, is youthful; and it is informal enough to appeal to high school and college boys (Figure 100).

### *Posing*

The young man photographed in a white shirt open at the neck, should be posed in an informal way to harmonize with the lighting and costume. This treatment, however, would be totally unsuitable for the portrait of a business man. Although there is a general tendency toward the informal in nearly all portraits of men, dignity and good taste must not be disregarded. One of the reasons for the informal pose is that the average man is somewhat ill at ease before



*Figure 100*

the camera, and fussing about him to perfect every fold and wrinkle only adds to his nervousness.

When a man steps in front of the camera, he is never quite sure of his appearance; but a woman always knows when she looks her best. A haircut, bath, shave and shoe shine are about the extent of a man's preparation for business and social contacts, and he has no idea what to do about dressing for a photograph. The average man is glad to have suggestions and advice in regard to his appearance, and he is reassured by a definite statement from the photographer that his clothing is in good order.

When a man who shows signs of self-consciousness enters the camera room, the chair I want him to occupy has previously been placed in position. I merely indicate the chair and for a few moments purposely turn my attention to camera or lamp. There is a possibility that the subject, under the impression that the equipment is not quite ready, will seat himself in a natural position and relax. If, however, he fails to do so, he should be asked to stand for a moment on the pretext that the chair is not quite in the desired position. If he fails the second time to sit in a natural position, I have found it best to suggest a natural pose by sitting down myself in another chair and asking him to assume a similar position in his chair.

The heavy man should not be posed in front of a light background because the bulk of the figure is emphasized. A chair which permits the fat man to support his arms while leaning slightly forward is one of the most effective ways to avoid emphasis of the prominent stomach (Figure 101). Fat men should never be permitted to lean back in the chair because this exaggerates obesity.

Bald heads are a rather frequent problem, and the usual method is to use a headscreen to reduce the reflected light from the top of the head. This, however, does not provide an effective remedy for all subjects because the bald head often makes the man's face look too long. The excessive vertical dimension can, however, be reduced by having the subject wear a hat (Figure 102).

A common form of headscreen is a metal rig covered with a thin black chiffon or similar material and mounted on a pedestal which





*Figure 101*



*Figure 102*

can be adjusted for height and to any desired angle. A headscreen should merely soften the light and it should not be covered with an opaque material because this is likely to cast a heavy shadow.

If a woman's ears are too prominent, she generally uses a style of hairdress that will cover the deformity, but this remedy is not available to men, at least not in the more civilized parts of the country. The offending ear can either be toned down by placing a headscreen between the light source and subject or by posing at an angle to the camera which will conceal one ear entirely and prevent the other from appearing in relief against the background (Figure 103).

Cigarettes, pipes, and other accessories used in conjunction with dramatic lighting effects afford opportunities for many unusual pictures. Subjects for photographs of this kind should have strong features and care must be exercised in the posing of the hands so that they will not be closer to the camera than the face of the subject (Figure 104).

### *Make-Up*

Good flesh tones and skin textures add strength and realism to a



*Figure 103*

man's portrait. A few minutes under studio lamps is usually sufficient to bring a warm, moist glow to the skin and no make-up is necessary. The desired effect can, however, be obtained with the application of a few drops of olive oil, evenly distributed over the face with the palm of the hand. Some of the skin lotions are also satisfactory for this purpose.

Subjects with heavy beards should shave, if possible, just before the photographs are made. If the subject has been shaved in a barber shop, remove excess powder if it is noticeable. Some barbers have a habit of dusting their customers with a large powder brush, liberally loaded with powder.

### *Retouching*

It is not my purpose to discuss how much or how little retouching should be done on a man's portrait, but to suggest that in most cases the negative should not be retouched at all. Figure 105 is a print made from an unretouched negative, and Figure 106 is a print made after the same negative was retouched by a retoucher who was instructed to retouch the negative as for a family portrait studio.





*Figure 105*

*Print from an unretouched negative. Note the lines of expression around the eyes and mouth which make this a natural and characteristic portrait.*



*Figure 106*

*Print from the same negative after retouching. The retoucher was instructed to retouch the negative as he would for a family portrait studio.*

I hasten to explain, for the benefit of those who might misinterpret my suggestion, that I have no prejudice whatsoever against retouching negatives or those who practice the so-called “art” of retouching. I avail myself of the services of an expert retoucher and if it is necessary to retouch a negative at all, the rule is that nothing is to be done that will change the character or appearance of the subject.

The psychological character of the average man is usually indicated by lines that time and circumstance have etched too deeply for the retoucher’s pencil to successfully remove. That is the reason that excessive retouching is more noticeable in the portrait of a man than in the portrait of a woman.

Those who deliberately try to flatter subjects by various retouching methods would be wise to consider the modern trend toward realism. The extensive use of “candid camera” photography by newspapers and magazines everywhere is ample evidence of public acceptance of the unretouched photograph, particularly of men.



*Figure 104*

## CHAPTER TEN

### Portraits of Children

Child portraiture is one of the most highly specialized branches of photography. Comparatively few photographers, amateur or professional, are temperamentally fitted to manage children so the better portraits are made by those who specialize in that field.

The opportunity is almost unlimited for men or women with the necessary qualifications, which are a thorough knowledge of child psychology and endless patience. There is a constant demand for good portraits of children and literally hundreds of communities have no competent child photographers. I have always considered this an ideal field for the advanced amateur who is interested in portrait photography. The necessary equipment is not elaborate or costly, and for those who make photography a hobby it offers an opportunity to obtain more than enough income to pay the overhead. Some professional photographers may take exception to this suggestion; but if they are operating their studios properly, they have no reason to worry about competition—amateur or professional.

#### *Equipment*

The Graflex is, in my opinion, pre-eminent among cameras for child portraits. I use magazines with a capacity of 18 cut films instead of the usual 12 to avoid interruption of the sitting for changing magazines. Film holders are not only too slow, but they are a nuisance





*Figure 107*

to handle unless an assistant is available to do nothing but focus the camera and change holders between exposures. I have used both 4x5 and  $3\frac{1}{4}\times 4\frac{1}{4}$ , and I would not buy any size smaller than a 4x5 camera. I have used lenses as fast as f2.5, but f4.5 is fast enough. My lens is equipped with a compound shutter and I consider this feature invaluable. The disturbing noise of the focal plane shutter is eliminated and a long cable release can be used. There is no reason that I know of for using a soft focus lens for portraits of children. Even with a sharp lens, very little if any retouching is necessary.

After much experimental work, I learned that the most satisfactory seat for young children is a bench. I built one about the size of a piano bench, finished it in ivory, and covered it with a tan colored piano bench pad (Figure 107). A bench forces the child to sit up straight because there is no back to lean against. It should be high enough so that young children cannot touch the floor with their feet. With feet off the floor and no back to lean against, much wriggling and squirming is eliminated; and there is no chair back to show in the picture.

A piece of furniture called a "baby holder" can be purchased from photographic supply houses, but I cannot recommend them. No one ever brought a baby to my studio that would fit the gadget.

With tiny babies, I prefer to use a large overstuffed chair and prop the child up with pillows covered with a large sheet of raw silk (Figure 108).

Elaborate equipment is unnecessary for the average portrait—with children it is a handicap. Children tire very quickly and excessive moving of furniture and lamps will cause them to lose interest in the proceedings. The routine work of placing furniture, lighting equipment, and camera in position should be done before the child enters the room so that the subject can be given undivided attention.

Babies, especially at the age when they are just able to sit up alone, must be photographed as quickly as possible. If enough satisfactory shots are not obtained in the first fifteen minutes, try again but *never on the same day*.

When a baby is teething, it sometimes drools at the mouth. One remedy for this is to place a small pinch of sugar on the tongue.

### *The Advance Interview*

The photographer of children will soon find that some mothers are almost as much of a problem as their offspring. The advance interview is, as a matter of fact, more necessary for the mother than for the child. If the child is quite young, the mother should be cautioned against coaching or even telling the child that a photograph is to be made. This warning is based on the very fundamentals of child psychology. Every doctor and nurse knows that the first emotion mankind experiences on this vale of tears is *fear*. As babies grow older they lose, for example, the fear of falling sensations; but all children and most adults fear that which is mysterious or not clearly understood. A child that has never been photographed, if informed of the impending event, may build up a lot of imaginary fears and enter the studio in apprehension of strange rites involving at least the removal of a tooth. Entering a studio that is dark and cold is bad enough, and if the photographer appears in a voluminous smock, long whiskers and a Windsor tie, like a character out of a story book, the child probably will never completely recover from the experience.



Figure 108

If the mother tells her child about the appointment at all, in advance, she should be instructed to describe the sitting as a *game* during which many interesting and attractive toys can be expected to appear.

It should be definitely understood that the mother will not, in any manner whatsoever, give the child advance instructions in regard to its behavior before the camera.

Mothers of little girls are inclined to overdo the costume and hair. I have known a mother to insist upon decorating a child's hair with a ribbon and then, when proofs were shown, want the ribbon removed. It always develops, of course, that the child *never* wears a hair ribbon at home and obviously it looks incongruous in the photograph.

It is advisable to discourage unusual styles of hair dressing and costumes that the subject seldom wears. A garment that has been laundered several times is always preferable to a new one. Small boys usually look uncomfortable in stiff, starched shirts and collars.



Soft materials in light colors are always best because they harmonize with light backgrounds and modern high key lighting.

### *Lighting*

I use two 1500 watt lamps in the studio in addition to the background lights and exposures range from one twenty-fifth of a second at f4.5 to one-tenth of a second at f8. with Panchromatic film.\* There is no way to control the motion of babies under one year of age, so the maximum shutter speed is advisable.

There is a psychological aspect to be considered in the selection of backgrounds in portraiture. Light tones suggest youth and gaiety, which of course is the reason for the universal choice of light colors for the costumes of young children. Dark, somber backgrounds are too heavy, and the effect is too contrasty for child portraiture. I use a white background exclusively for children. If high key effects are wanted, I project enough light on the background to obtain the desired effect. If delicate gray background tones are needed, the background lights are eliminated, leaving only the light reflected from the studio walls to the white background. By control of the reflected light, various shades of gray background tones can be produced.

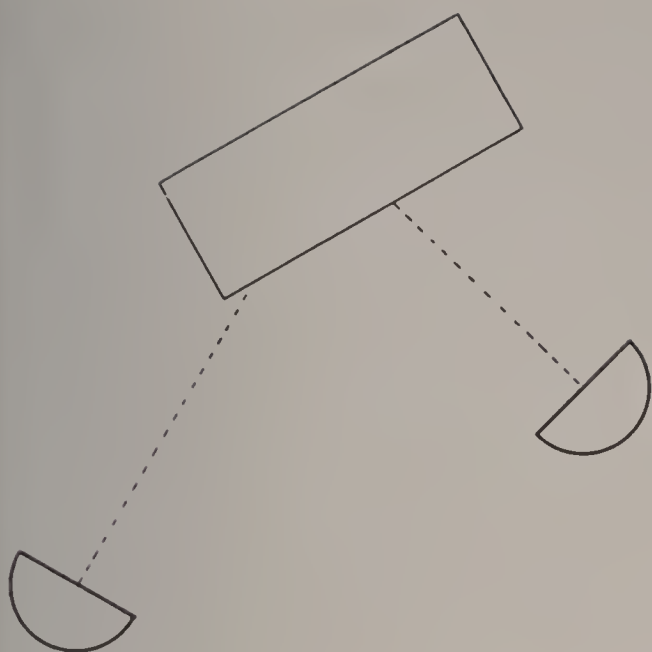
Simplicity is the keynote of lighting for all portraits of children. Heavy shadows and dramatic lightings are definitely out. If the temptation to use spotlights cannot be resisted, they should be put under lock and key. An exception could be made, for example, in the case of a young girl with an abundance of curly hair.

Forty-five degree lighting is the most satisfactory for children because it combines good delineation of form with a variety of effects obtainable with few adjustments in the position of the lamps.

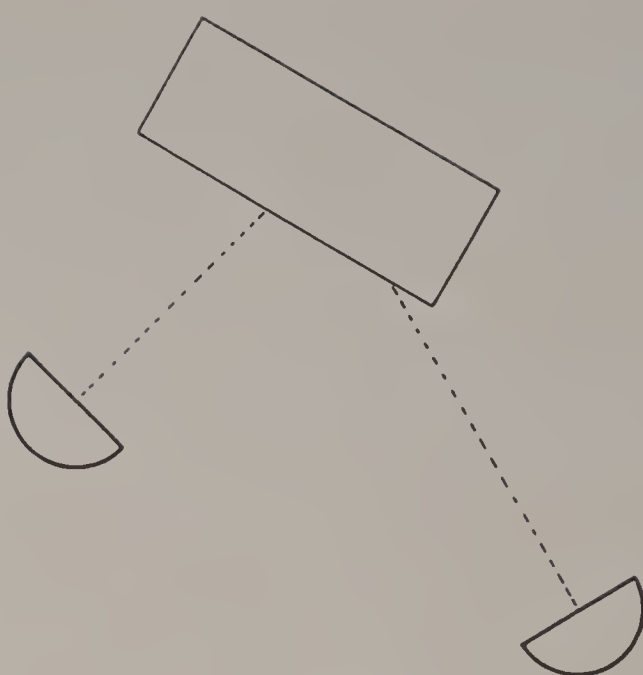
Both amateur and professional photographers want interesting expressions and a variety of poses. The professional knows from experience that the more proofs submitted of different poses, the larger the order will be. A successful sitting should result in several negatives facing in each direction. Parents usually want more than

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\*Eastman Portrait Panchromatic. The use of Super-Sensitive Panchromatic film would permit more rapid exposure, but I prefer the Portrait Panchromatic, especially for subjects with blue eyes.



*Figure 109*



*Figure 110*

one pose, and if two or more prints are mounted in panels or frames, they should face each other—not both in the same direction.

An efficient way to make a variety of poses is to arrange camera, lights, and furniture before the subject enters the room. (Figure 109.) In the floor plan shown it will be noted that the bench upon which the child is seated is placed at an angle of about 35 degrees in relation to the position of the camera; and that the main light source is on the right. After making the desired number of exposures in the first position, the angle of the bench is reversed and the main light moved to the left of the camera (Figure 110). Changing the position of the main light in each case necessitates the moving of the secondary illumination unit. Camera and background remain in the same position and if the lighting units are equipped with rubber tired casters, the change can be made without noise or confusion.

Lighting should tend from normal toward flat, rather than into the contrast region of the forty-five degree elevation and floor plan

zones. Exposures should be full because the flesh tones will print dark and unpleasant from under-exposed negatives. Lighting for children should be delicate with soft highlights, and harsh contrasty lighting should be avoided at all costs.

### *Posing*

Strictly speaking, children under about seven or eight years of age cannot be posed, but by suggestion and guidance the elementary principles of portrait composition can be observed. Children are naturally graceful in their movements, but in response to a direct command to pose in a particular way they almost invariably look awkward.

Some children become badly frightened if a stranger lays hands upon them, so it is a good rule not to touch a child unless it is absolutely necessary. One way to suggest a pose is for the photographer himself to assume the desired position and *ask* the child if he can do likewise. Most children have sufficient competitive spirit to want to demonstrate their ability, and they are pleased at an opportunity to cooperate with the photographer.

### *Psychology in the Camera Room*

Mothers should not be in the camera room unless the subject is a baby, in which case she can do no harm, and may even render valuable assistance. Every child presents a different psychological problem and in addition to his ability to analyze the character of his little subjects, the photographer must have the ingenuity to cope with every situation that may arise.

An interesting example is the case of a five-year-old boy whom I photographed recently. Circumstances over which neither the parents nor myself had control prevented an advance interview and the little fellow was rushed into the studio by his mother and a nurse. While the nurse combed the boy's hair, I had a short talk with the mother and she readily agreed to my suggestion that she and the nurse remain in the reception room. But as she left the camera room, she turned and pointed a warning forefinger at the child and said, "Now remember what I told you about smiling!" The result was the grimace of a cigar store wooden Indian. I sat down for a moment and said,





*Figure 111*

“Peter, I have a whole chest of toys that I would like to show you, but your mother wants some photographs, so let us make two or three pictures just to please her and then we can forget all about the camera. This suggestion was greeted with enthusiasm, and I went through a rather elaborate pantomime of making two or three pictures. After this psychological preparation, the rest was easy. With the cable release in one hand, I displayed a variety of toys, walking about in the direction I wanted the subject to face and carrying on a conversation during the entire proceeding. When the proofs were submitted, the mother selected 8 poses and ordered 40 prints.

While the child is in the proper mood and is responding favorably, I make one negative after another as rapidly as the plates can be changed. I make as many negatives as I consider necessary to produce a characteristic portrait and I always have plenty of films at hand when I start.

Toys should be selected with care and entertainment should never be exciting or boisterous. Animated toys and those in which there

is an element of mystery are best. Plain boxes out of which toy animals or comic figures emerge, unexpectedly, are good because they arouse the child's natural curiosity and hold the interest in anticipation of further surprises. One of the best toys I have found is a cloth monkey which can be worn on the hand (Figure 111). Many antics can be performed by the manipulation of the fingers inside of the toy.

Although toys may insure the success of many portraits, the real test of the photographer's ability to judge character comes when he decides which children should *not* be entertained with toys. The spoiled, disobedient child will insist upon taking over the entire toy department and he may flatly refuse to have anything to do with portraits after a toy appears on the scene. Children of this type can generally be distinguished by the habit of putting their fingers on everything in the studio that is not securely nailed down.

One of the most charming little girls that I have ever photographed simply could not be kept in front of the camera long enough to make exposures. She bounced off the bench and out of the room—laughing and playing until everyone was completely worn out. I decided that the child found too many things of interest in the studio and suggested to her mother that we probably could photograph her without difficulty at home. An appointment was made and subsequent events proved that my reasoning was correct. At home, where all of the surroundings were familiar, she found nothing to distract attention and the result was a portrait that was a joy to the mother and a prize winner in a photographic competition (Figure 112).

It is a common fault of adults to fondle children and to make extravagant comments on their appearance and behavior. Children appreciate this habit far less than we think, but they grow to expect it. If there is reason to believe that a child is spoiled and unruly, it is sometimes advisable to deliberately ignore him when he enters the camera room. His curiosity is aroused by the apparent indifference of the photographer and his interest is centered upon whatever activity is taking place in the studio at the moment. When the photographer quietly turns to him and asks him to perform some small task



*Figure 112*



he is so pleased that he has attracted attention that he obeys without hesitation. Thus a spirit of cooperation and understanding is established by a method that takes the recalcitrant child completely by surprise.

Some of the most difficult child subjects come from the homes of those whom the famous authority on etiquette, Emily Post, calls our "best people." Through the indifference of servants and the failure of the mother to perform the natural duties of a parent, children from such homes too often escape the salutary benefits of a liberal application of the rod. It is good policy to avoid undue familiarity with children, even those who appear to be a bit shy at first. The photographer should not be deceived by an angelic countenance—its owner may attack the piano with edged tools the moment his back is turned.

## CHAPTER ELEVEN

### Hollywood Portraits

One simply has to see Hollywood to understand the psychology and simian antics of its inhabitants. What in other cities would be considered fantastic and incredible is in the movie capital merely commonplace. The outstanding characteristic of the Hollywood portrait is *contrast*. The better examples of this type of photograph have a dynamic, explosive quality from which the observer has little, if any, chance to escape.

In addition to their attention-getting qualities, Hollywood portraits are supposed to illustrate glamour, sophistication, sex-appeal and in fact they run the entire gamut of human emotions. Their popularity is partly due to the movie magazines which in recent years have literally flooded the country. Photographs of movie stars are shipped by the ton to every newspaper or magazine willing to publish them.

As far as the technique is concerned, if the equipment is available, there is no reason that I know of why the photographer in Pensacola, Peoria, or Pocatello cannot make "Hollywood" portraits. The ques-

tion, however, and this every photographer will have to settle for himself, is whether or not this type of portrait is suitable for his customers. The Hollywood boys have no problems of dignity or good taste to worry about—they are selling a product of uniform quality in most cases bearing the familiar label “Glamour.”

The essential characteristics of the Hollywood portrait are contrasty lighting, exotic posing, and super-size prints. Costumes range from bathing suits weighing a couple of ounces to elaborate, historical creations costing thousands of dollars.

Make-up is, of course, applied by masters of the craft—this permitting close-up pictures. Intimate poses are favored and curves are always emphasized over straight lines. Heads much larger than life size are popular, and 30"x40" prints are common. To photograph a young woman seated in normal position in a chair is almost unheard of, and there is no limit to the gymnastics used in efforts to get unusual poses, particularly of the intimate and reclining type (Figure 113). A stepladder is an indispensable item of equipment in making pictures of this kind, because of the unusual camera angles.

Some of the most unusual pictures are obtained by the simple expedient of twisting the negative in the enlarger, or mounting the print in an unexpected manner (Figures 114-115).

### *Lighting*

In the chapter on lighting, I promised to discuss certain features of lighting in connection with Hollywood portraits. Many of the best-known Hollywood photographers deliberately work with unbalanced lights, and there is often a total absence of consistency in the direction of the light source. The lighting in most pictures is extremely contrasty with the lamps in the contrast region in height and floor plan position. The most important exception is a system (which enjoys considerable popularity in Hollywood at the present time) where the main light source is placed almost directly over and slightly in front of the camera. Ordinarily, this would result in flat lighting, but the secret of success with this system is to elevate the





*Figure 113*

light into the contrast zone to the extent that the nose of the subject casts a shadow almost directly downward toward the mouth. This, of course, is merely one interpretation of dramatic lighting, and for certain subject types it is very effective (Figure 116). It should never be used with subjects having high cheekbones or thin faces.

Those who wish to make Hollywood portraits should confine their efforts to young women. It should be remembered that most portraits in Hollywood are posed by selected subjects who are by actual test ideal photographic subjects. Some of the features which are the most effective in photographs of this type are large eyes, long eyelashes,



*Figure 114. Posed as a horizontal portrait.*

full and well shaped lips, and what is most important, *youth*.

The photographer must exercise good judgment in the selection of subjects, because the public cannot be expected to do so. A woman came into my studio recently with a page torn from a movie magazine, showing a young and well-known motion picture actress in a sinuous, reclining position, costumed in a form-revealing drape of velvet. This woman, who weighed at least 225 pounds, admitted to my receptionist that she was 47 years of age. It should not be necessary to add that I refused to even discuss such a picture with her, but every photographer is sure to encounter such preposterous suggestions.



*Figure 115. Figure 114 mounted as a vertical print to obtain unusual effect.*





*Figure 116*

## CHAPTER TWELVE

### Outdoor Portraits

That there is a difference between a snapshot and a portrait most photographers will agree. The question might logically be raised as to whether a good, unretouched snapshot made when the subject was at ease was not a better portrait than a studio portrait made under less favorable conditions. As a matter of fact, a great many people depart from this world of sorrows leaving behind no portrait other than the production of a box camera. But this memento may be as highly prized as the work of a portrait painter by those who knew the subject. Unquestionably, the average person appears more natural in a snapshot, because they do not take snapshots seriously enough to pose for them.

The better examples of outdoor portraits are equal in craftsmanship to the studio picture—the only important difference being in lighting and surroundings.

The surroundings and backgrounds generally make it possible to introduce pictorial composition in outdoor portraits. Trees and shrubbery are sometimes utilized for interesting shadow patterns. Disturbing influences should be kept out of the background, especially objects of an angular nature, or those having lines leading out of the picture. Many full figure portraits are made outdoors, and

costumes should always be informal and in harmony with the surroundings. Posing should be informal, but technically correct. As implied by the term "portrait," the subject will be in repose rather than in action.

### *Outdoor Lighting*

The best light for an outdoor portrait is indirect, or reflected light. A light haze, or what in California is called "high fog" is excellent. With the modern ultra rapid films, instantaneous exposures can be made on the north side of buildings with open sky overhead. Direct sunlight is too harsh, because it throws the eyes into pockets of deep shadow. Daylight is at its best before 10:00 in the morning and after 4:00 in the evening. Some of the most beautiful lighting effects I have ever seen were obtained before 7:00 in the morning and after 6:00 in the evening.

Everyone is familiar with the improvement in motion pictures; much improvement, of course, can be traced to better meters and the use of Panchromatic film, but lighting technique has shown enormous improvement. Cameramen have, as a result of careful study, learned to produce a wide variety of effects with ordinary sunlight. Skill and knowledge in the use of filters has also resulted in the improvement of pictures. The importance of the right kind of light for a certain effect sometimes keeps a motion picture company waiting on location for days and even weeks for the proper effect. The possibilities of the early morning and late evening light can scarcely be overestimated.

Nearly all of the effects described in the chapter in this book on "Lighting" can be produced in a modified form by sunlight if the subject is posed at various times during the day in the same relation to the sun as the subject shown in the diagrams in this book. Any desired kind of flat lighting, 45° lighting, or contrast lighting can be produced by choosing the time of day when the sun is in the approximate position as the main light source in the studio.

The power of direct sunlight can be utilized for an occasional character study, and the open sky makes an effective background. When the open sky is wanted for a background, the subject should



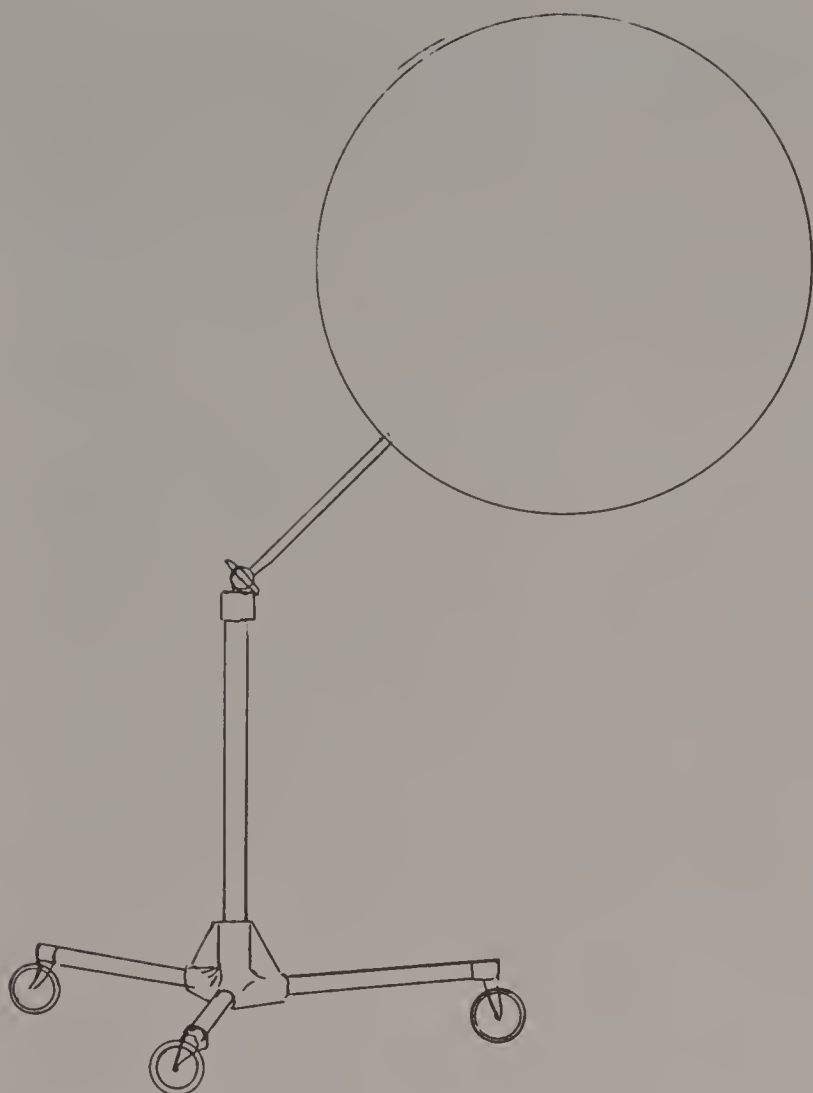


*Figure 117*

be posed on the brow of a hill or elevation, or the same effect can be obtained by shooting upward from a low camera angle. A K1 or K2 filter with the exposure kept at a minimum will result in a dark sky which is an effective background for white shirts, dresses, and light colored sports attire.

A great variety of new garden furniture has been designed in recent years, and the modern homes with gardens and patios make beautiful backgrounds for outdoor portraits (Figure 117).

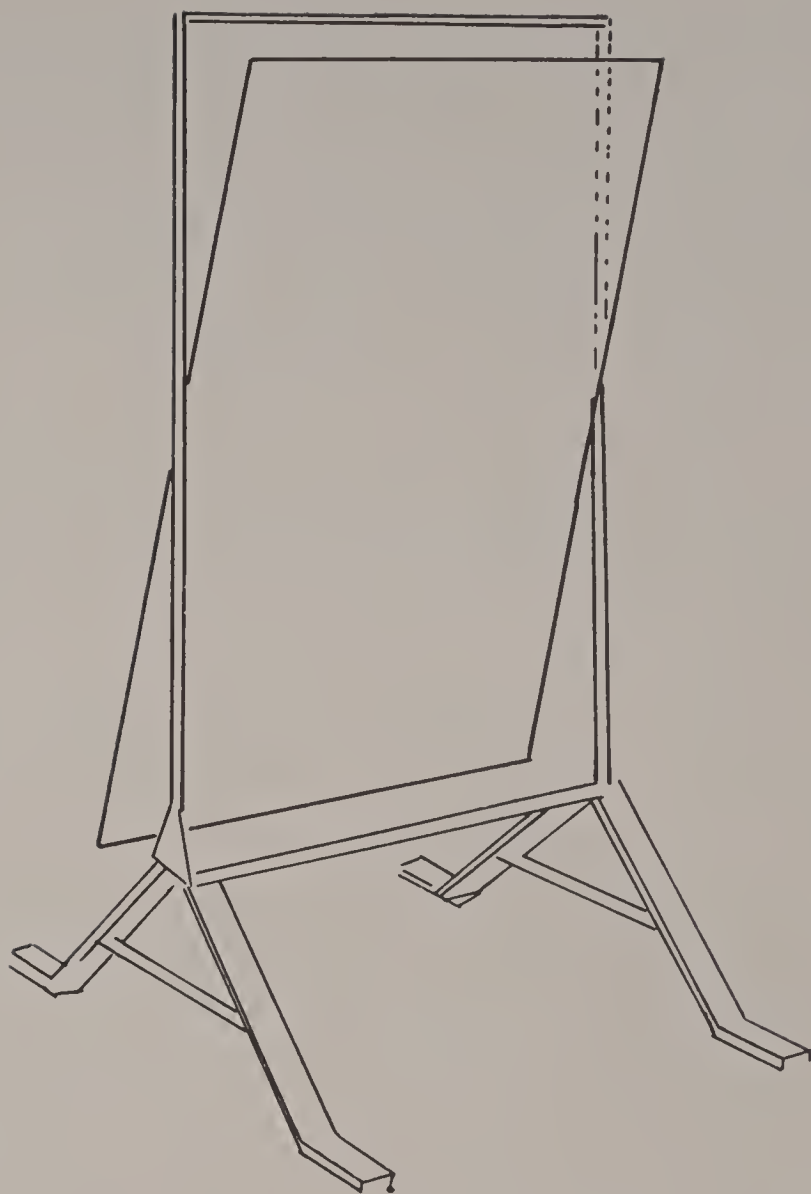
Two useful accessories for those who do considerable outdoor portraiture are the head screen and reflector. The head screen should be covered with a light cheese cloth so that it is transparent, because its purpose is to reduce excessive contrast; and it should never be covered with a material heavy enough to make it appear opaque



*Figure 118*

when in use (Figure 118). Suitable reflectors can be made of thin plywood covered with metal foil or painted with aluminum paint (Figure 119). Both accessories should be light in weight as well as portable, because they will nearly always be used at some distance from the studio.

Backlighting in outdoor portraiture produces some very effective pictures. This is sometimes called “shooting into the sun”, and a good sunshade must be used to protect the lens from the direct light of the sun and also from stray shafts of reflected light from sidewalks and buildings. Many backlighted shots are spoiled by the under exposure of the subject’s features. If an exposure meter is used, it is advisable to hold the instrument close enough to the subject’s face to obtain an accurate reading on both the highlight and shadow sides. If the contrast is extreme, the exposure should be sufficient to provide good detail in the shadows and development should be done by the



*Figure 119*

low accelerator method described in Chapter 4 to prevent the blocking up of the highlights.

There is in California a school of photographers who have organized what they call the “f64 group.” The name implies the constant use of stop f64, but actually they use any stop desired, provided the result is a photograph in which every detail is sharply in focus. They accomplish their objectives entirely by photographic methods, and retouching of negatives is definitely taboo. Prints are glossy, but not ferrotyped, and are usually mounted on a card mount with a semi-glossy surface. The majority of the photographs produced by this group are made by daylight, and in my opinion they are the finest examples of long scale negative making to be found anywhere today.

A few magnificent examples of photographic portraiture have been produced by members of this group, but as far as I know there



is no photographer living today who can say that he has ever made even a meager livelihood out of such portraits. The difficulty centers about the stark realism of the print produced by this method, and very few people, especially women, are willing to accept a photograph in which every skin blemish, wrinkle, and pore is rendered as sharply as if done with an etching tool.

The exponents of the f64 method are apparently more interested in the technical problems of pure photography than in the psychological aspects of portraiture, and in such practical matters as costume and make-up.

That a portrait produced by pure photography is more "honest" than those in which retouching and projection control has been used is a question that I do not propose to argue here. My policy is to produce portraits by photographic methods, and I use every available means of reducing retouching to a minimum. I attempt to make portraits that are an exact likeness of the subject, and I consider make-up, costume, and artificial lighting to be legitimate aids in attaining this objective. My point of view in such matters is well illustrated by the story of the man who asked his friend whether Grant or Lee was the better General, to which his friend replied, "I don't know who was the best General, but they paid off on Grant."

## CHAPTER THIRTEEN

### Home Portraiture

There are two separate and distinct kinds of home portraiture of which the amateur snapshot is the most common, and the professional variety made for profit is the other. The opportunities in this field are almost unlimited and why it has been neglected by professional photographers is a mystery to me.

With Photo-Flood lamps and Panchromatic film, fast shutter speeds can be used with the light obtainable from an ordinary house circuit. Photo-Flood lamps deliver an actinic value approximately ten times greater than an ordinary lamp with the same current consumption. The life of these lamps is approximately two hours, but a great many photographs can be made with one set of lamps by burning them only during the actual exposure. This is sometimes accomplished by placing ordinary lamps in the same group or bank of lights for focusing, and switching on the photo-floods, which are of course controlled by a separate switch, when the shot is made. Another method is to use a voltage reducing rheostat which dissipates the excessive voltage of the line into heat during the focusing process after which the full power of the 110-120 volt line can be switched on.

A fine selection of lighting equipment is now available for use with Photo-Flood lamps and the prices are within the reach of nearly everyone.

## *Home Portraiture for Professional Photographers*

The studio owner in a prosperous community should build up a good business in home portraits with very little increase in overhead expense. Almost anyone experienced in selling portraits will agree that getting people into the studio is the most difficult step in making a sale. This I think is due to the fact that in many communities almost everyone in town has been photographed with the same studio furniture and in front of the same background. It is, of course, economically impossible to provide a different background and furnishings for every subject, but if one photographer in the community could do this he would gain a decided advantage over his competitors. This, in effect, is what can be done by the portrait photographer who specializes in home portraits.

There are prosperous people in every community who can afford to buy portraits and who can be sold if they are offered something different. Most of them live in artistic and luxurious homes with ideal pictorial surroundings for portraits. Many modern homes and apartments are decorated in a manner which reflect the personality and psychological character of various members of the family. Although families with children and pets are the better prospects, others who own beautiful homes should not be overlooked. Pride of possession is a powerful motive and if the photographer has enough imagination and initiative to show the prospect how the architectural features of the home can be utilized he will, in most cases, be given an opportunity to demonstrate his ability. Negotiations with a family of established financial and social standing in the community should be conducted in a manner that will insure a substantial order for the photographer and the ultimate satisfaction of the customer.

If a stranger enters the studio it is good business to secure a definite order and a deposit. But an effort to obtain a commitment for a certain number of prints before home portraits are made is likely to result in an order that is not at all commensurate with the wealth of the customer. A deposit may be collected if desired, but the important thing is to have an appointment arranged when the entire family are present and to make sure that enough time will be



allowed to permit the making of a generous number of negatives.

Every member of the family should be photographed regardless of the original plan. They should be photographed singly, in groups, with pets, and in as many different rooms as possible. The garden, patio or lawn should not be overlooked especially if interesting outdoor furniture is available.

Needless to say, a plentiful supply of films should be taken along for a home portrait appointment. A definite appointment to show proofs should be arranged before leaving the home. I have found that when young people of high school age or older appear in portraits, it is a good idea to have them present when proofs are submitted because their enthusiasm generally means a larger order.

Most studios have sufficient portable equipment for home portraiture, but for the benefit of those who contemplate the purchase of an outfit, a few suggestions will be offered. A 5x7 view camera with three lenses is an excellent choice. A view camera has the advantage of bellows adjustment for everything from wide angle to long focus lenses and the rising front is very necessary for interior and architectural shots. There should be a wide angle lens for the smaller rooms, one intermediate and a portrait lens of not more than 10 inch focal length.

For those who specialize in home portraits of children, a Graflex equipped with an f4.5 lens is recommended. Most home portrait appointments require the use of an automobile to carry equipment and the Graflex adds very little weight so I always take both cameras.

The exposure meter should be carried at all times because unexpected conditions are most likely to arise when making portraits in homes. Using artificial light of known value is routine work, but moving out into a garden or in the shade of trees and shrubbery in daylight of questionable value is quite another matter.

### *Home Portraiture for the Amateur*

Most professional photographers start as amateurs and at first probably have no intention of making photographs for compensation.

It has been my observation that real progress in photography dates from the time the amateur starts to do all of his own laboratory

work. As long as someone else develops the negatives and makes the prints, errors in composition, lighting, and exposure seem to continue. But when the intelligent, industrious man endeavors to find out *why* he failed, improvement can be expected.

The darkroom, film development, and print making have received more attention than any photographic subjects that I know of and I do not propose to add to the vast literature that already exists. I have long suspected that the mechanics of photography is the basis of the interest of many photographers. This is particularly true of those who spend most of their time experimenting with developers, papers, and semi-photographic processes. I use sensitized materials prepared by a concern that has a corps of scientists constantly trying, with unlimited resources of money and materials, to improve their products and methods of using them. I am convinced that it is good judgment on my part to use these materials in accordance with the instructions of the manufacturer. Any competent authority will agree that the materials now on the market have possibilities of negative and print quality which few photographers even approach.

When I enter a darkroom and find the shelves cluttered with bottles containing intensifiers and reducers, I know that the photographer has not availed himself of the facilities for producing clean, correctly exposed and developed negatives of good printing quality. It should not be necessary to sell anyone the idea of time and temperature tank development and there is no excuse for the under or over development of negatives.

With the exposure meters on the market today, and with films of known speed, there is no excuse for incorrect exposure. The beginner will waste enough film in a very short time to pay for the best meter on the market.

Under exposure and under development should not be confused with over exposure and over development. No amount of development and no method of intensification will make a good negative out of one that is badly under exposed, because there is no possible way to get detail where it does not exist in the negative as a result of exposure.



Reduction and intensification are only makeshift remedies and they should only be used when films are not properly developed.

The photographer who decides, early in his career, to work only with *good* negatives and to retake every shot that does not result in a satisfactory negative, will be more than repaid for any trouble this policy may entail.

### *Equipment*

If the amateur has an ambition to turn professional, equipment should be selected with this idea in mind. I can report, from experience, that an easy way to lose money fast is to buy photographic equipment and then start replacing it.

The serious amateur who is interested in photography as a hobby is the logical owner and user of a miniature camera. If the fact that the miniature camera is a precision instrument is kept constantly in mind, the amateur who has a well-equipped laboratory ought to produce home portraits of good quality.

I think the one piece of equipment that is most difficult to get amateurs to use is a tripod. A miniature camera, even on a light weight tripod looks ridiculous but superior results are well worth all the trouble involved in carrying and using a tripod. It should be remembered that the head of a subject may make an image several inches in diameter on film of the size commonly used in portrait photography, but the same size may make an image very little larger than the head of a pin on the miniature negative. This means that the slightest movement of the miniature camera is likely to result in a “fuzzy” negative whereas the same amount of movement might be unnoticed on the larger films.

Those who wish to use artificial light can purchase suitable lighting equipment for home portraits for a few dollars. This matter of lighting equipment can be carried to any extreme that the ambition of the photographer dictates and a further discussion here on the subject would be a needless repetition of the material contained in an earlier chapter.



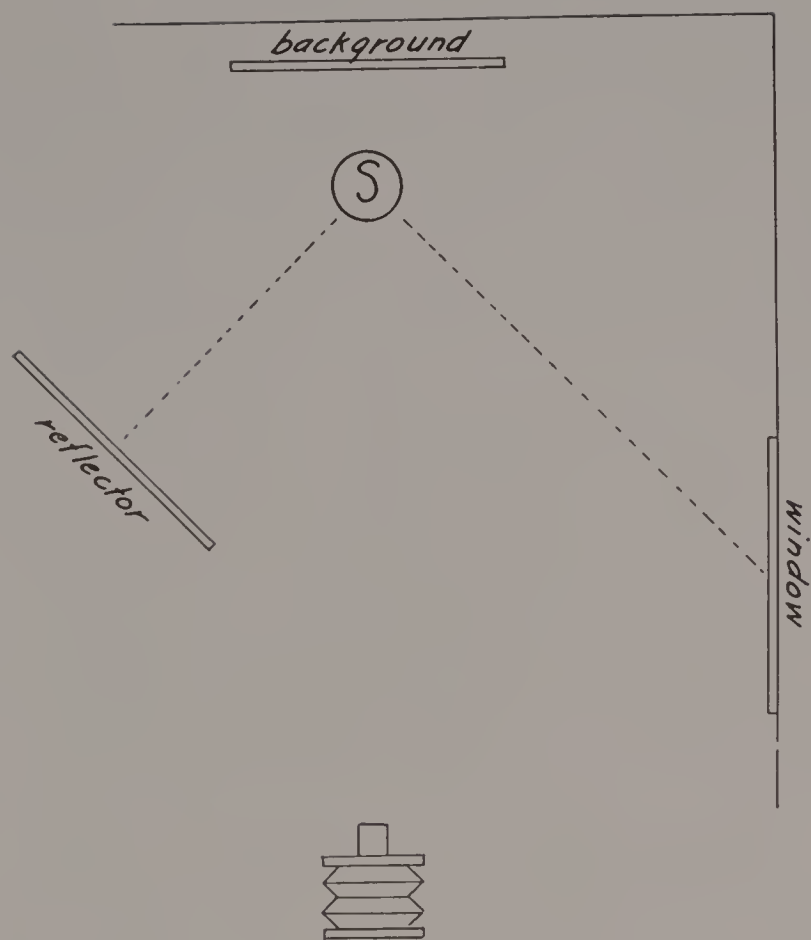


Figure 120

### *Making the Home Portrait*

The word “portrait” implies something better than the so-called “snapshot” and the elementary principles of lighting and posing should be utilized. With the fast films now available, instantaneous exposures can be made indoors provided the subject is close enough to an open window. The reason that the window must be *open* is to prevent the loss of light value due to the refraction and absorption of the light rays by the window glass. A reflector should be used on the shadow side and if a suitable screen is not available, a sheet draped over the backs of a couple of chairs will do (Figure 120). With the lower portion of the window covered with a piece of cheese cloth, the upper portion becomes a  $45^\circ$  light source, comparable to a studio skylight. Figure 121 was made in this manner.

This basic portrait lighting can be improved upon by those who have two or more inexpensive lighting units, because of the possibility of *control*.

From these simple beginnings, the amateur can work into the more elaborate portrait lightings. There is no limit to what can be



*Figure 121*



*Figure 122*



*Figure 123*

accomplished by a man who has sufficient imagination and the determination necessary to carry out his ideas. The amateur has many advantages, one of which is time in which to plan and execute pictures of his family and friends that few professional photographers could equal. A good example of this is the portrait of one of my daughters, made on Christmas Eve in front of the family fireplace (Figure 122). This home portrait made when I was an amateur would be difficult for a professional photographer to duplicate because a child so young is always conscious of a stranger in the home.

Some of the most pleasing home portraits can be obtained by "candid camera" methods. Children are ideal subjects and one of the most successful amateurs I know is a kindergarten teacher. She carries a camera constantly and finally the children cease to pay any attention to the instrument. A tripod is impractical for portraits made under these circumstances, so exposures must be fast enough



so that the camera can be held in the hands. One-fiftieth of a second exposure, or even faster, is preferable. Home portraits made by following children at play are necessarily informal, and getting a picture that tells a story is far more important than the rules of composition (Figure 123).

Most children, especially if they have pets, have a daily routine of activities which, with a little ingenuity, can be photographed. In this example, the large Persian cat was in the habit of watching the baby eat breakfast every morning. Lights and camera were set up and the photographer merely waited for something to happen.

In conclusion, I should like to emphasize the importance of *patience*. The most elaborate equipment and a profound knowledge of the technical side of portrait photography are useless without it. Impatience is communicated to the subject instantly, and when the photographer “blows up,” the camera should be placed on the shelf for the day. If I were asked to name the most important psychological attribute for success as a portrait photographer, I would, without hesitation, say patience.

## CHAPTER FOURTEEN

### Portrait Photography As a Business

Many of the professional photographers of the future will, no doubt, be recruited from the ranks of present day amateurs. The amateur photographer who contemplates opening a portrait studio should familiarize himself with the problems which confront the modern photographer before he starts in business.

Portrait photography has been going through a trying period on account of the economic condition of the country. In the large cities competition is bitter and the business is more or less divided into two classifications; first, established conservative studios with a clientele of regular customers who are willing to pay a fairly substantial price for portraits and, second, the chain or cut rate studios operating by mass sale and production methods.

Photographers today, in common with all other business men, have *one* big problem and that is, to get enough business to make a profit. In the past the average photographer built up a reputation upon the basis of his work and by one customer telling another about his studio. The average studio owner was a notoriously poor advertiser, if in fact, he did *any* advertising at all. Word of mouth advertising is the finest kind of publicity, *but* it is painfully slow and under present economic conditions it will not produce enough results to support a large studio in a competitive market.

There is a vast difference between a one man enterprise and a commercial studio where the work is done by employees. The photographer who builds a business upon the basis of his personal ability will find it very difficult to satisfy old customers, when he opens a larger studio and hires help to make the portraits. His customers like his style and technique, and it is utterly impossible to duplicate it with hired help. The reason for this is obvious. Regardless of how good a photographer may be, he cannot duplicate the results obtained by another photographer working with the same equipment.

The amateur who intends to become a portrait photographer should decide as early in his career as possible, whether or not he is going to build a business on his name or operate under a firm name as a commercial enterprise.

The amateur with limited capital can often use a suitable residence building as a combination home and studio until his reputation becomes firmly established.

The photographer who opens a new studio in a good business district will require a substantial amount of capital to cover the high overhead until the business becomes established.

A good location is not sufficient. Ways and means of getting customers into the studio must be provided. Advertising in some form is the only way to do it, and the medium to be used depends to a very great extent on the type of studio. When one customer tells another about the studio, that is advertising, but as I have pointed out before, it is too slow for modern business.

Some studios do considerable speculative business. There are endless ramifications but in general the method is to ask permission to photograph society women and others who are more or less in the news. The photographs are made, ostensibly for publication, and the photographer's remuneration and profit depends upon making a sale from the proofs shown. This method of obtaining business is of questionable value because in many communities prominent people are hounded by photographers until they cannot be induced to enter a studio. Many have had the experience of sitting for a



portrait, supposedly for publication, only to be brow-beaten and shamed into buying photographs which in many cases were entirely unsatisfactory.

Following up wedding and birth announcements is one of the most prolific sources of business and the competition in this field is intense. Most of this business is obtained by telephone or by personal calls by salesmen. Telephone and personal calls are an expensive medium of advertising if salesmen and saleswomen are paid on a salary basis. Unfortunately, it is very difficult to secure good sales people on a straight commission basis. I advertised for both men and women a few months ago in one of the largest metropolitan newspapers in America. The advertisements all stated plainly that the positions offered were on straight commission. The results were appalling. The only applicants were riff-raff in spite of the fact that there are millions of unemployed in the country.

To be effective advertising must be consistent. The fact that a single advertisement does not produce traceable results is not sufficient reason to stop advertising. If after a thorough trial, a particular advertising medium fails to produce results, try another. The wise advertiser does not imitate others—originality is the basis of success in most advertising campaigns. For example, a photographer should not hesitate to use outdoor advertising simply because the other photographers in town don't use it. Immense, beautifully painted Outdoor Advertising Bulletins would attract wide attention *because* other photographers are not using them.

Advertising should be directed at a definite market. There should be a particular copy appeal—not just a hit and miss one. If the studio specializes in quality work at higher than average prices, the advertising should emphasize quality.

Of all advertising appeals price is the most powerful. There are two reasons for this: First of course, is the economic turmoil of the country, and, second, the fact that photographs are a luxury in the average home.

Competition for the “luxury” fund of the average family today

is terrific. The photographer must battle the powerful advertising and selling campaigns of automobile and radio manufacturers for his share. He is at a disadvantage too, because he demands cash, whereas there are dozens of things that the average person wants more than photographs and most of them can be bought on easy credit terms.

The photographers should form the strongest possible trade association and use national advertising to make the public "portrait conscious." It would cost considerable money, but that is the only way I know of that photographers can get their share of the "luxury money" available. The individual photographer can't do the job, it is far too big, and it is obviously a cooperative problem.











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